

Contents

NEWS

SEAL Update	3
Amiga Inc. Update	7

FEATURES

Dave Haynie Interview	8
Fleecy Moss Interview	10
Gary Peake Interview	11
Microsoft	12
PPC Software Round-up	16
Graphics Cards Explained	18
Flight Sims	29

REVIEWS

Scoring System	14
Blizzard PPC	14
CyberVision PPC	17
DOPus Magellan II	22
Sound Probe	25
Oloflight	28
PD Paradise	30

SUPPORT

Workbench Cookbook	32
Letters	34
Next Issue, Helpline etc.	35
Gallery	36



Got a tip you'd like to share with other Amiga users? It can be related to the OS or a specific piece of software or hardware.

Send it to us at any of the addresses in the Blurb section and you could well have a grey box all of your own!

Letter from the Editor

Welcome to the second issue of Clubbed and an especially warm welcome to all the new subscribers and members who have come along since the first issue. Also since the last issue we've received lots of positive comments and constructive suggestions for the magazine. Please keep sending in your ideas so we can make Clubbed a monster-mag!

Just before this issue went to press we made an arrangement with two Amiga software distributors (Underground PD and Forematt Home Computing), for them to distribute Clubbed flyers with the packages they send out. Because of their brilliant support we hope to increase the number of subscribers to Clubbed drastically and with a larger subscriber base we will be able to improve the magazine with more pages and content. Read more about these exciting developments in the SEAL Update section!

In tandem with the flyers going out we have decided to increase the price of Clubbed to £2.50 an issue, please see the news page for the reasons behind the increase (current subscriptions are not effected of course).

As I mentioned earlier we have received a number of suggestions for the magazine, many of which we have implemented in this issue. Some of the more important ones are:

Improved Tutorial - We hope you'll find the tutorial in this issue easier to follow and more comprehensive than before. We're on the look out for more good tutorials so if you'd like to have a go at writing one or have a topic you'd like to see covered please tell us.

Wider Coverage - In the first issue we concentrated on the high-end user. In this issue we have tried to be more balanced, catering for you whatever your Amiga skills and budget. We'll be improving this further in future and as usual suggestions are very welcome.

Jargon Busters - In complex articles and features you'll find Jargon Buster boxouts to help you understand some of the technical words and abbreviations used.



More Product Information - With every review we've added a box with the essential information on the product including the price and details of the supplier.

I hope these and the many minor changes will enhance your enjoyment of the mag. Don't hesitate to contact us with any other ideas you have.

The big news since the last issue of Clubbed was the Computer 98 show which took place in Cologne, Germany, last November. As you've probably read about it by now we've just included a summary of the releases and the announcements from Amiga Inc. along with the developments that have happened since. Take a look at the News pages for the gory details and the other exciting stuff that's going on in Amiga-land.

If you're looking to upgrade your A1200 we have several items to interest you this issue, with the Blizzard PPC accelerator getting the once over by Mick Sutton and Gary Storm, and an in-depth look at your options for adding a graphics card in my Graphics Cards Explained feature.

For those of you on a tight budget Gary Storm has written a tutorial on making a basic A1200 look really cool using only 16 colours to keep the speed up. We also have another great batch of PD utilities reviewed in our PD Paradise section.

Enjoy the mag,

Robert

The Chairman Speaks

Despite my last attempt at writing an article for Clubbed magazine here I am again.

In this months issue of Clubbed I am trying to convey the message that upgrading your Amiga lets you get much more from it, and can also be done relatively economically.

If you have an older machine like an A500 the best route is often to upgrade to an A1200 as they are much easier and cheaper to expand, and therefore a better base to build upon. For example, it is often cheaper to buy an A1200 and a harddrive than to buy a sidecar harddrive for an A500.

One of the good things about the Amiga is that you can upgrade it in stages, as your budget allows. Even members of SEAL with hi-spec systems (myself included) are still using components of their original Amiga bought 5 or more years ago. The important thing is to choose upgrades wisely with a "vision" of your perfect Amiga in mind. This way you won't have to replace existing hardware when you buy new bits. If you bought a small hard-drive now, and then expand your machine so you can use high-end software, the chances are you'll want to upgrade again very soon, whereas if you spend a bit more on a bigger hard-drive you won't have to replace it so quickly.

As you upgrade your machine you'll find more and more software becomes available to you and many programs that you use now are transformed. Even bread and butter programs like Final Writer and Wordworth come into their own with a faster processor (030+) and a chunk of RAM to play with. You simply can't play the latest games like Genetic Species, Foundation, Quake and Napalm without a well expanded machine. Also a faster machine will allow you to fully exploit the Amiga's multitasking, and you can run several programs without worrying about running out of memory or speed.



In standard action requesters (where you choose to proceed with or cancel an operation) L-Amiga+V selects the positive choice (OK, Proceed etc.) and L-Amiga+B selects Cancel. There are also several utilities (e.g. ARQ, and RTPatch) which map OK to Return and Cancel to Esc on the keyboard.



A good affordable system for most users would have an '030 (£80) or '040 (£130) accelerator; 16Mb (£25); a 2Gb Hard drive (£70); and CD-ROM (£90). All these items can be added gradually to your system, enhancing it at each step. If you want to go further it may well be worth getting a tower early on because it will allow you to buy cheaper internal CD-ROMs and fit 3.5" hard drives more easily. A tower also means you'll be able to use graphics cards and PPC accelerators later on.

So please think about upgrading your machine. If you love your Amiga and want to get the best from it using the latest software, I am afraid some money has to be lavished on the miggys.

Here is a list of up-grades that my machine has experienced over the years:

ICS Tower; 4.3 GB Hard drive; 32 speed SCSI CD-ROM drive; Phase 5 PPC 240 Mhz with 060 and SCSI controller; Microvitec 17" M1764 Monitor; and a Canon BJC600 inkjet printer. My latest upgrade is a Phase 5 BVision Graphics card which I have just received to add onto my accelerator.

Mick Sutton

SEAL UPDATE

South Essex Amiga Link

Members

Since the last mag Mick Sutton has got himself an Internet account so you can now EMail him at sicky@btinternet.com. Also a warm welcome to all the members who have joined since the last issue!

Web Site

Just after Christmas we uploaded a major update to the SEAL web site. The new design uses a top navigation frame (we have included a special welcome page for non-frames browsers) which makes jumping from page to page easier. Highlights of the new pages include a much improved news page, more membership information and several new sections in the links page.

The SEAL web site is at:
<http://seal.amiga.tn>

Blurb

Clubbed is published quarterly by South Essex Amiga Link. For subscription details see the back page.

Editor: Robert Williams

Design: Robert Williams

Contributors:

Gary Storm
Mick Sutton
Geoff Milnes
Thomas Hurst
Martin Miller

Cover Art: Robert Williams and Gary Storm

If you have any queries suggestions or want to contact us for any reason please use one of the following:

Email: clubbed@williams.demon.co.uk

WWW: <http://seal.amiga.tn/>

Post: Clubbed,
26 Wincoat Drive,
BENFLEET,
Essex,
SS7 5AH,
ENGLAND.

Telephone: +44 (0) 1268 569937
(19:00 - 22:00 GMT only please).

The views expressed in this magazine are those of the author of each piece, they do not necessarily reflect the views of the editor, other contributors or SEAL.

Please Note: Clubbed is produced by SEAL members in their spare time, while we will always strive to produce the mag on time and include all the advertised contents this is not always possible if other commitments get in the way. The price you pay for Clubbed covers our costs and nothing more, we don't make a profit from it.

If you wish to contact a contributor please send your message to one of the addresses above and we will pass it on.

Amiga is a registered trademark and the Amiga logo, AmigaDOS, Amiga Kickstart, Amiga Workbench, Autoconfig, Bridgeboard, and Powered by Amiga are trademarks of AMIGA International, Inc. / Gateway, Inc. All other trademarks mentioned are the property of their respective owners.

SEAL Update Continued...

A major update to the Clubbed section along with new graphics on the main site will be started after this issue of Clubbed goes to press.

Meetings

Just after the last magazine went to the printers the SEAL committee made the decision to start having meetings at our hall venue every two weeks rather than every four but to scrap the meetings we were having at member's houses in between. Members will find the meeting dates for the next three months printed on the letter enclosed with this magazine. You can also find the dates and the activities we plan for each meeting on the Members section of the SEAL web site.

In November Robert Williams and Gary Storm gave a presentation on Internet access with the Amiga and explained the various services available on the net and the software available that allows the Amiga to access them. They also covered the costs of getting connected and what modems can be used with the Amiga. At this meeting we were pleased to have a visit from Richard Blair of the Power Amiga User Group in Portsmouth. Richard was working in London for a few days and dropped in to see us.

For the first meeting of the new year Michael Carillo a friend of Mick Suttons and webmaster of the Amiga Yellow pages bought his towered A1200 along for us to help him fit his new BVision PPC graphics card to his PowerUP accelerator. Although it took a bit longer than expected we got him up and running with a brilliant high resolution colourful Amiga by the end of the evening.

If any member of SEAL has ideas for activities for future meetings, has some software or hardware they'd like to demonstrate or would like to give a presentation at a meeting please let a member of the committee know. We're keen to

cover as many aspects of the Amiga as possible and everyone's contribution is appreciated.

Discounts!

We have been hard at work arranging support for SEAL from Amiga suppliers, so far we have two great Amiga companies signed up to help us publicise Clubbed and give our members a discount. Gary Storm is working at persuading more to help us; we are especially looking for a hardware dealer.

Underground PD

SEAL has got together with Underground PD who are a quality PD library located nearby in Shoburyness Essex. Not only have Underground agreed to distribute Clubbed flyers with the parcels and mail shots they send out but they are also offering a 10% discount to SEAL members*. SEAL members will find an Underground catalog disk enclosed with this issue so they can place an order straight away.

We'd like to thank Dave and his team at Underground for their support.

Forematt Home Computing

Forematt can supply you with a wide variety of Amiga software covering both games, utilities and applications. Like Underground they have agreed to distribute Clubbed Flyers with their packages, again everyone here at SEAL really appreciates their support. Forematt have an advert in this issue of Clubbed, see page 29 to get just a small sample of their range. Forematt will also give a discount to SEAL members* which varies depending on what you purchase and how you pay.

*Please note these offers apply only to full SEAL members, Clubbed Subscribers cannot use them, sorry!



A great place to get the latest Amiga news on the Internet is Czech Amiga News which reports Amiga news world-wide and is updated daily: <http://www.realdreams.cz/amiga>

Clubbed News Price Increase

As I wrote in my editorial we have decided to increase the price of Clubbed to £2.50 per issue. At the old price of £2 per issue we barely covered our costs and a few unsold magazines would have meant making a loss. At the new price we have a little extra to cover these costs and some buffer to pay for emergencies like equipment breakdown or an increase in printing costs. We continue to be non-profit making with everyone giving their time for free and we hope that more subscribers, along with the new price will allow us to expand the magazine soon.

Existing subscribers will of course receive the magazines they have paid for at the old rate. We believe that Clubbed is still excellent value at the new price and hope you will agree.

Change of Address and Telephone Number

The Clubbed contact address and telephone number have changed so please update your records, the new details are:

Clubbed,
26 Wincoat Drive,
BENFLEET,
Essex, SS7 5AH.
Tel: (01268) 569937

Please leave a message on the answerphone if we're not there as we'll get back to you.

Keeping Gamers Alive

Alive Mediasoft have announced that Heretic and Hexen conversions based on the recently released source code are available for 68k and PPC users with a HD, CD-ROM and 8Mb. Gfx cards are supported too. The titles cost £15 each. Descent is also back in stock with all-new mission packs. £15 if you have an '030 minimum. 'Putty Squad' is due to be finished and available in February. They even have a CD-catalogue available for £3, or free with any order over £30.

'Goal! Season' (AKA 'Goal! 2) and 'Phoenix Fighters' (an overhead shoot-em-up) are also planned by Alive.

Warp3D Sets the Standard

Haage and Partner have recently released the first version of their driver system for 3D accelerated graphics cards, Warp3D. Warp3D will provide a common software interface (API) to all 3D accelerated graphics cards on the Amiga allowing programmers to support all cards without writing a separate driver for each one. Currently Warp3D only has a driver for the Phase 5 CyberVision 64/3D which uses the S3 Virge chip, a driver for the CyberVision and BlizzardVision PPC cards using the much more powerful Permedia 2 processor is expected as we go to press. H&P have also promised support for the forthcoming Voodoo module for the Picasso IV and any other Amiga

graphics cards with 3D acceleration that appear. Warp3D supports both CyberGraphX and Picasso 96.

The first software using Warp3D is already available in the form of StormMESA 3.0 from the author of Warp3D and a Descent port. Storm MESA is an Amiga port of an OpenGL compatible graphics library. OpenGL is the 3D system used by many serious applications and increasingly games on other platforms.

Warp 3D and StormMESA are free downloads from the H&P's site: <http://www.haage-partner.com>



Voodoo for Picasso IV

VillageTronic have announced that they will be making a Voodoo 3DFX based 3D accelerator for their popular Picasso IV graphics card after over 500 Amiga users pre-ordered the add-on. Due to the current slow Amiga market VT said they couldn't justify developing the board unless at least 500 people placed firm orders in advance.

The Voodoo board will fit on the Picasso IV along with the existing add-on modules already available for the board. Unlike most PC implementations of the Voodoo accelerator which can only give full screen accelerated 3D displays,

mostly used for games, VillageTronic's solution will allow 3D acceleration in a window. This is ideal for more serious applications such as real time previews in 3D rendering software. The Voodoo module will be supported by Haage and Partner's Warp3D software (see separate news item). To use the Voodoo module you need a Picasso IV card running in a Zorro III slot. VT have warned that they will only be producing a limited run of the Voodoo modules so if you want one it is advisable to pre-order it. Delivery dates have not been quoted but the board is expected to be ready in the first half of this year.

VillageTronic are at: <http://www.villagetrionic.com>

Elbox Announce New A1200 Busboard and Graphics Card

Elbox the Polish firm that manufactures the Power Tower and Power Flyer have announced a new Busboard for the A1200. The new board has 5 standard Amiga Zorro II slots (like the earlier bus boards from Micronik and RBM) plus 2 clock ports and 2 additional slots which Elbox call Zorro 4. Despite the name these slots are non-standard, there never was an official Zorro 4 from Commodore, Escom, or Amiga Inc..

The Zorro 4 slots have a transfer rate of about 15Mb/s using DMA to popular accelerators. This design makes them much faster than Zorro II and about the

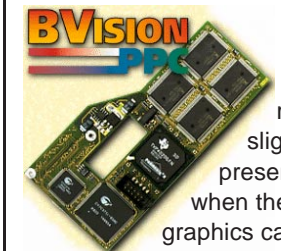
same as Zorro III, they are also faster than the slots on the Ateo bus card. Elbox have announced a Zorro 4 version of the Power Flyer and a graphics card so far. No specifications are available for the graphics card except that it will have a pass-through for standard Amiga modes. The new bus board is expected to sell at a similar price to the current Zorro II to boards which would put it around the £130 mark.

Elbox products are distributed in the UK by Power Computing: (01234) 851800 <http://www.powerc.com>

AF Subscription Prices Slashed

Subscribing to the UK's only newsstand Amiga magazine has just become a whole lot cheaper. A years sub to either the CD or disk edition now costs only £39.99. This cuts the cost to almost half the street price if you subscribe. With AF becoming harder to find in newsagents now is certainly a great time to subscribe. At the same time AF have announced that the newsstand price of the floppy disk edition is going up to the same £5.99 level as the CD mag, yet another reason to get that CD ROM drive! You can contact the AF subscription hot line on: (01458) 271102

I Can See Clearly Now the Blizzard has Come



Eager Blizzard PPC owners across the land received a slightly early present from Phase 5 when their BVision PPC graphics cards arrived in the UK barely a week before Christmas. The new boards which feature a Permedia 2 2D/3D graphics chip have been enhanced from the original specification with 8Mb of SGRAM (twice as much as was planned) and sell at a slightly lower price too. The BVision attaches directly to the Blizzard PPC bus giving it a much higher bus speed than any other Amiga graphics card. Mechanically the BVision fits across the A1200 with the video connector on a flying lead making a tower almost essential.

A full review of the BVision will be in the next issue of Clubbed but in the mean time you can read a review of the CyberVision PPC on page 17 which is almost the same card but for the A3/4000 PPC cards.

See PPC Price Drop item on the following page for prices and distributors.

Emperor Vost

Nick Veitch has moved from Amiga Format to another magazine, and so Ben Vost (ex deputy editor) has taken the helm. We'd like to thank Nick for all his great work over the years on CU and AF. We know Ben's an Amiga nutter and will kick some more ass!

Kickstart 1999

Kickstart the Surrey based Amiga user group are holding a second sale after the success of the event they organised last year. Along with 18 tables of new and secondhand Amiga gear there will also be Doom, Sensi and Skidmarks tournaments. If that wasn't enough Amiga International have donated an A1200 Magic Pack as a door prize.

The event will be held at Brook Hall, Brox Road, Ottershaw, Surrey from 13:00 to 17:00 on **Saturday the 27th of February**, admission is £1. See also:

<http://www.furry.demon.co.uk/kickstart>

Amiga Soc Schemes

Amiga Society, a UK wide Internet based Amiga user group have started a couple of initiatives to make buying Amiga products easier:

Shareware

Amiga Soc will give people the opportunity to register shareware at any event they can attend. We'll be seeing them first at the Kickstart sale on 27th February. This is great news for users, and for the authors. Register the shareware that you use... it's worth it.

Storefinder

In co-operation with the Amiga Yellow Pages Amiga Soc have launched their UK Amiga Storefinder. Using AmigaSoc's postcode database UK residents will be able to find their nearest Amiga shop or repair centre by simply entering their postcode. AmigaSoc hope that this will encourage Amiga owners to find and support their local Amiga shops.

Storefinder:

<http://uk.amigasoc.org/storefinder>

Aussies Talk Amiga

Petro visited Australia recently, and stirred up quite a bit of interest in the media, with people realising that the Amiga isn't dead yet. A recent APC article asked the question "Can the Amiga fly again?", and the amount of feedback is astounding, with many saying that the Amiga is much more reliable than a PC, and its return would be greeted with open arms by many in the tech world. Let's just hope that Gateway/A-Inc do the business.

PPC Price Drop

In October both the main UK distributors of Phase 5's PowerUP Power PC accelerators, White Knight Technologies and Blittersoft, substantially dropped their prices. Along with the release of the CyberVision PPC and BlizzardVision PPC graphics cards the price drop makes the PPC cards more attractive than ever. The cost of a BlizzardPPC board and BVision graphics card is now very competitive with the various other A1200 graphics card options too.

Example Prices from Blittersoft

BlizzardPPC (A1200)

160Mhz PPC 603e and 25Mhz '040	£199.95
160Mhz PPC 603e, 25Mhz '040 and SCSI	£249.95
240Mhz PPC 603e, 50Mhz '060 and SCSI	£549.95
BVisionPPC graphics card (8Mb Video RAM)	£139.95

CyberStormPPC (A3/4000)

CyberStormPPC 233Mhz PPC604e, 25Mhz '040 and SCSI	£479.95
CyberStormPPC 233Mhz PPC604e, 50Mhz '060 and SCSI	£669.95
CyberVisionPPC graphics card (8Mb Video RAM)	£149.95

Blittersoft: (01908) 261466 - <http://www.blittersoft.com>

White Knight: (01920) 822321 - <http://welcome.to/white-knight>

IOBlix Modules

RBM Digitaltechnik of Germany have announced three new modules for their IOBlix Zorro I/O board (which was released last year and gives any Zorro equipped Amiga 4 extra serial ports and 2 parallel ports). The new modules are a 10MB/s Ethernet module, a 16bit sound card and a 100MB/s Ethernet module. The 100MB/s Ethernet module will be the first available on the Amiga. RBM have also released separate IOBlix fast serial and parallel cards for the A1200 clock port at £50 each.

The Zorro IOBlix costs about £90 (prices for the add-ons are not yet available) and is available from dealers including:

Active: (01325) 460116

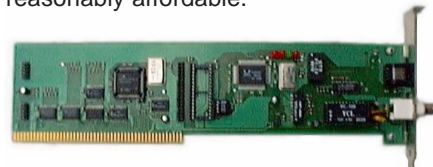
<http://www.active-net.co.uk>

Eyetech: (01642) 713185

<http://www.eyetech.co.uk>

Cheaper Ethernet

VillageTronic have introduced a new lower cost version of their Ariadne Ethernet card called the Ariadne II. The All is a Zorro II card suitable for any Amiga with Zorro slots. It has both 10base2 and 10baseT Ethernet connections. Although the Ariadne II loses the additional parallel ports of its predecessor it costs almost half the price at just £80. This is still a lot more than an equivalent PC card (£15 to £20) but it at least makes Ethernet on the Amiga reasonably affordable.



VillageTronic's UK distributor is

Blittersoft (01908) 261466

<http://www.blittersoft.com>

New Amiga Mag!

A new glossy monthly magazine is to be launched in the next few months, called 'Amiga Active', from PinPrint Publishing. They plan to cover all aspects of the Amiga including games, multimedia, hardware, creativity and the Internet. There will also be an extensive technical help section. Each issue will have a cover-mounted cd, well-known Amiga names, and be on sale for £4.99. You can visit PinPrint's website at:

<http://www.btinternet.co.uk/~pppsales>



...Updates...

Here are some updates on the news stories we reported in the last issue of Clubbed

Final Office CD

Software Partners posted on their web site that the Final Office CD was going for duplication in November. Since then no further information has been posted and they don't respond to EMail... draw your own conclusions.

Photogenics NG

The new version of Photogenics is not out yet but Paul Nolan has told us he's is currently preparing the release version. He said it will be ready soon but couldn't give us an exact date.

WoA 1999

Unfortunately there's no more news on WoA but we assume it's still going ahead in May, however I managed to forget to the web address for the WoA home page last issue so here it is:

<http://www.fortunecity.com/tattooine/carpenter/241/woa99.htm>

Melody 1200 Sound Cards

These high quality 16bit sound cards for the A1200 clock port are now available from Blittersoft. There are three versions, the base at £129.95, Plus with MPEG layer II decoding at £149.95 and Pro with MPEG layer III decoding at £189.95.



Napalm

Just as we went to press ClickBoom announced that Napalm, their real-time strategy game, is shipping on the 12th of February 1999 which means it should be available by the time you read this!

Amiga Update

By Gary Storm

Well, as you probably all know by now, A-Inc announced QNX as their partner in developing the next Amiga operating system (version 5) at the Cologne show in November, and will be writing the OS on top of a QNX kernel. QNX gave a demo of the power and flexibility of their system, and everyone was well impressed. Apparently most of the QNX engineers are either Amiga users or fans, and had to be beaten back with a stick when the deal was done and some engineers chosen to work on the project.

Just before Cologne, Fleecy Moss left A-Inc, as his contract wasn't renewed. No-one knows why, but Fleecy has said that the decision wasn't personal (for more see our interview on page 10). Fleecy has since gone on to spearhead the KOSH project, which is building a Community Operating System and Hardware, a cross-platform os guided by the users.

After Fleecy's departure, OS3.5 was in doubt but Jeff Schindler's recent statement has clarified the situation a little. Other details of what the OS might include are hazy, as some developers / programmers pulled out due to the Fleecy's situation and seeming lack of interest from A-Inc. ARTAS (re-targetable audio) will be available separately from OS3.5 now, as will Matt Chamut's excellent 'Glow-Icons'. OS3.5 is due during the first half of the year, and you will need to bung in some 3.1 ROMs to use it.

Petro Tyschtschenko recently went down-under and stirred up a nest of Amiga patriots and fans, and Petro said that he'd been selling loads of miggys to India and China for video work, internet and suchlike.

That's about it, really. A-Inc are very busy designing/building/testing for the next generation of Amigas, as they should be. By the time issue 3 of this fine mag comes out, the OS5Dev system should be out, and we'll have more of an idea exactly what the new miggys will be like. Don't hold your breath though, and upgrade your existing A1200s etc. Plenty more life left in the old girls yet.

An Open Letter to the Amiga Community - December 1998

Amiga has always had certain strengths that have never been matched by any other operating system. It's small, efficient, and multimedia-centric. As Allan Havemose has often said, "We just did it right."

There has been a great deal of excitement and concern over the last few weeks about the future for the Amiga. With the recent announcement in Germany of our OS partner QNX and the demonstration of what this package can do, we began speeding forward to the future.

When Amiga Inc. was formed our goal was to determine the best road for Amiga to take. We wanted to: Continue the current development path and create another version of the operating system. Build a new team from scratch and re-write the OS with the new features necessary to be competitive. Locate an operating system with the same ideals and spirit that the Amiga has.

We joined in a partnership with QNX to create the NG Amiga. But that didn't mean that we intended to forget about the classic system users and the faithful Amiga community.

We are committed to a long and exciting future for the Amiga, and the community that has kept this magnificent architecture alive.

Amiga 3.5 is a work in progress; it has NOT been abandoned. ...we are going back to each and every partner in the 3.5 project to make sure that what they are working on is what our customers require. It is critical that we deliver what we promised—a complete package.

Thanks for your patience and support. The Amiga is on the right path, and we look forward to delivering both 3.5 and the NG Amiga soon.

Keep the faith. We're close.
Jeff Schindler

Dave Haynie

Gary Storm talks to the Dave Haynie who worked at Commodore on the A2000, A3000 and A4000. He is now Vice President of Technology at Met@box Infonet (formerly PIOS)

Gary Storm spoke to Dave Haynie about the future of the Amiga and computers in general.

Right Dave, for those who don't know what a nutter you are, tell us about your history in the computer industry thus far.

I started on the Amiga in 1986, though I had been programming it as soon as I could get one. I had been left in charge of the 8-bit stuff after the previous head of that HW group, Bil Herd, left the company for greener pastures (he runs jersey.net now). We had a few C128 spinoffs, but nothing that could get management interested. Meanwhile, some others (George Robbins and Bob Welland), disenfranchised from their current project (Commodore 900, the UNIX workstation, kind of a Sun-2 like machine) which was cancelled when C= bought Amiga, set around looking for new things to do. They settled on making a cost reduced Amiga, which became the A500. I was on that for a month, expected to take it over (as the low end guy), while George took over the A2000-CR project (applying the A500 technology to Commodore Germany's "A1000 with expansion" machine). George didn't want to give up the A500, so I took over the A2000 project. Just me.

From there, I worked on the A2620 with Bob Welland, the A2630 followup (Welland had left during the A2620 project), several related research projects and other add-in stuff. By the summer of '88, it was pretty clear we needed a whole new system architecture for the next real machine, not just plug in boards. So I started working out a new bus architecture, which became Zorro III. By February of 1989, the A3000 project was running full steam (in fact, the final work on the A2630 was put off on a junior guy to let me share the technical helm of the A3000 with Greg Berlin). We also had Hedley Davis (project manager), Scott Hood (Amber chip), and Jeff Boyer (DMAC) involved in the project, making it the largest hardware project done at Commodore. Along the way, we hired Scott Schaeffer, a guy with

68040 experience six months before the '040 shipped, to develop a 68040 module for the A3000 in parallel (this was actually working, as well as '040s worked then, at the April 24, 1990 official introduction of the A3000, though management didn't show it).

After the A3000, I got increasingly into advanced projects. While Berlin was doing the A3000T, I worked with Bob Raible's new AA chip architecture, to deliver the A3000+, the first AA machine (booted up with a working display and all in early February, 1991). This machine was also to have the DSP3210 coprocessor from AT&T, to support sound, graphics, and other multimedia stuff, as well as software modem functions. Jeff Porter (Director of New Product Development) and I actually had to meet with AT&T to convince them that they wanted to sell chips on every motherboard, not nickel and dime us for every program module so that we couldn't do anything with the DSP.

Ultimately, the project was cancelled, as new management (Bill Sydnes and Lew Eggebrecht) were brought in to run Commodore Engineering. There guys were from IBM and other places, and had absolutely no concept about working in a balls-to-the-wall environment like Commodore. Also, Sydnes was far more concerned with looking good to then C= president Mehdi Ali than actually doing engineering. So, along with cancelling nearly every on-going project (wouldn't want something the other guys touched to get out there), he had the AA project delayed by six months. So rather than ship the A3000+ in April '92, we shipped the A4000 (really just a stripped down A3000 with AA chips) in September of '92.

I had pretty much pegged Sydnes/Ali as being the downfall of Commodore. I first saw this coming in the fall of '91. Of course, technical folks look for technical answers, and so I set forth to do a paper and, eventually, CAD design for our next-generation system, since I figured Sydnes couldn't last forever (he didn't approve anything but testing AA for six months, even though {a} we had a test

engineering group already for this, and the damn thing already worked before he even walked through the door. So, rather, I had a bunch of unofficial projects. The Acutiator architecture, this new thing for building "highly modular" systems, 68K or RISC, it didn't matter. Then there was a board-level version of the DSP3210 hardware, for Zorro III. I had a dual processor 68030 card for further proving new Buster Level II features and experimenting with multi-processing under AmigaOS (that's me and the software group, not just hacking around), and a Zorro III SCSI design, to make up for the lack of SCSI in the A4000. And, to top it all off, I was also working on a prototype of a AAA machine, to test out the new Advanced Amiga Architecture when it came along. So that's basically what I did in from fall of '91 to fall of '93.

By then, let's see. The AAA protos worked, the chips needed a revision, there was no money, the project was "indefinitely tabled". The SCSI card had gone to production as A4091. Scott Schaeffer and I had done some Acutiator logic, I had revised the spec to use PCI rather than the AMI (Amiga Modular Interconnect) bus I made up before PCI was announced (very similar in intent).

I left Commodore in June of '94, just over a month after they announced bankruptcy and fired all but about 30 of us. I chose then mainly because Scala made me an offer I couldn't refuse then, but also, I figure an engineer is someone who does engineering, and there really wasn't much left to do at C= back then.

While at Scala, I was hired to consult for Amiga Technologies as their head of hardware design. I proposed a cool \$500 (1996) PowerAmiga system, Andy Finkel put together a project plan to get AmigaOS on that puppy in a year. All was good, but Escom ran themselves into financial trouble. They started going under, Amiga Technologies was one of the first cancellations.

But it didn't quite die there. Stefan Domeyer, GM at AT, managed to collect interest around the notion of this cheap connected Amiga, and from that we founded PIOS Computer in May of 1996. I worked for them free for over a year, since I didn't have any investment money to put in. The initial goal of making the cheap PPC system waned as it became clear AmigaOS wasn't going anywhere we could tap it. We decided later in '96 to build a machine to support MacOS (we had built a MacOS clone business to fund other work) and the new BeOS. A meeting with Apple actually got up on the CHRP

bandwagon, they promised full MacOS support, something we couldn't have easily had otherwise. This was dubbed the PIOS One (the current version is in my cellar here), a far more upscale machine than the cheap Amiga.

The One was going well, if not great (this kind of development isn't easy on a C= budget, it's crazy on a startup budget), when Apple decided to cancel all MacOS licensing, Mac Clones, and CHRP support, in September of '1997. Being that our life's blood was tied to MacOS, we had to move quickly to something else. In January of '98, that something else was started as the Met@box, another spin on the cheap, connected computer, only this time using special modem technology to allow servers to talk to clients (downstream only, of course) over existing TV signals. This is our current project, not done yet but getting close.

Tell us more about KOSH, and why did you agree to get involved?

KOSH is an effort to do basically what I said up above, take what everyone learned from the AmigaOS and other experiences and make a new OS. While this was given a name by Fleecy Moss, I think many of us around the Amiga community, and perhaps elsewhere, have had similar things in mind.

For years I have had ideas for new ways to put things together using objects. For example, a kernel, not a monolithic thing like a Linux kernel or even Amiga's Exec, but rather as a set of independent and replaceable objects that live in a sort of "object sea" (my name for it, but apparently now a rallying point in the KOSH groups). Another is an object file system, using a concept I call "translucent containers", which kind of blur any distinction between data files on disc and data objects loaded in memory. In layman's terms, a JPEG file that knows its a JPEG file; there's never any need for an image editor, icon, or anything else that can use an image to know what "JPEG" really means. If you wanted to, you could replace the main "ascii text file" class with a "ascii text/image file" class (inherits from both ASCII file and Image), and then start dropping text files into every picture editor in your system.

I'm slowly working on an object sea whitepaper, written at a level where anyone, just about anyway, should be able to understand.

What's your opinion of the way A-Inc/Gateway have handled the Amiga since they purchased it? Should we be thankful they decide to do anything at all with it and keep the Amiga alive in any small way, even if it is

just be be an STB or Console?

Given that I have it on good authority that Gateway did buy Amiga just for the patents, I suppose we can be pretty grateful that they're "doing something", rather than just ignoring it. Though I had a theory about this: if they took the Amiga and simply treated it ok, they might get a large enough population of Amiga fans buying Gateway PCs, rather than someone else's, to make "doing something" pay for itself, and more. After all, many Amiga fans are using PCs today, even if they still use Amigas. Most, myself included (if I ever had occasion to buy a whole PC), would rather buy from anyone "Amiga friendly" than just any old clone company.

On the other hand, they're really quiet, so it's impossible to say just where they're taking this. I had pretty much given up any hope of seeing a new AmigaOS launch, after AT failed, after the whole ViScorp thing, after PIOS (now Met@box) couldn't get a source license early on, etc. So given that things got about as bad as possible short of someone officially announcing they're burying the AmigaOS, that Gateway has kept something going, is good news. But it's such a relative bit of good news, and Amiga fans are still so idealistic, it's not surprised that many people are very upset with the whole Gateway thing.

If you could have an enhanced Amiga OS, running natively on a Pentium or G3 or whatever (ie no stink of any Microsoft anywhere near), would you think that as being more feasible than an Amiga OS on a kick-ass Amiga?

Absolutely. There's nothing you could do today on a 68K of any kind that's going to be real interesting, at least not beyond the level of a handheld. The high-end 68Ks are many times more expensive than PPC or even x86 chips many times faster than them. Modernized AmigaOS, even on a properly configured modern PC clone, would blow away today's Amigas or anything you could build based on the existing Amiga architecture.

That's not a slam against the Amiga, but look at the timeframe. The A3000 architecture, the most advanced Amiga system architecture built (the basis for A3000, A3000+, A3000T, A4000, A4000T, and the "Nyx" AAA prototype), was locked down in mid-1989. That's six months or less short of ten years ago. The AA chips, the best Amiga chips completed, were really an evolution of the ECS architecture, itself a small jump from the original Amiga chips of 1984. PC system architecture has been evolving at an amazing rate ... you've had

about 4-5 full PC generations since the last time the Amiga was innovative. That's a hell of a long time. ... The Amiga was ahead of its time, sure, but not that far ahead.

Software, on the other hand, has evolved too, but not necessarily in the right directions. Most of what Microsoft does is about sustaining the dominance of the Windows platform, not really about evolving the personal computer and how people program or use it. These may seem related issues, but they really aren't.

What can we users do to keep the Amiga going, or is it time to bow out, as it doesn't seem to be a viable market anymore?

Well, I guess anything I know that would work, I'm doing if it's currently in my power. I know lots of folks would like to promote an AmigaOS, any AmigaOS, from Amiga, Inc. But currently, they offer no one any chance to help out. That, in fact, was part of what fleecy had in mind with KOSH – official involvement of the community.

If, today, there was an OS that did for me what the AmigaOS did for me, I think I would stop trying so hard to re-create, in some way or another, what we had at Amiga. I have tons of other things to work on, I don't necessarily have to do nothing but make new systems and OSs. In fact, I would like a chance to write a few applications for an OS that I approve of.

I became a Be developer to get involved in that, since it was the only real alternative the AmigaOS came out, and it's right now the best thing going. Part of that is specifically because Amiga people got involved early on (in the BeBox days). I'm a bit sad the way they let Apple make a straw-man excuse that'll let them opt out, eventually, of the PPC market. On the other hand, when Apple stabs them in the back (and I can't help but feel some kinship there, as Apple practically killed PIOS/Met@box with their destruction of the "Mac Clone" market), Motorola and IBM sit around watching like uninterested parties, and Intel offers them a few suitcases full of cash and use of engineers to support BeOS on the x86, I can't really blame Be for not becoming the PPC's new cheerleader.

Still, I think BeOS falls short of the mark. Maybe not, but that's the way it looks today. Maybe it'll improve, or maybe we'll keep the KOSH thing going long enough to see fruits. And they will definitely have the taste we've been craving for years, and the personal computer will evolve...

Fleecy Moss

Gary Storm spoke to Fleecy Moss soon after his departure from Amiga Inc.

What the hell happened, Fleecy? Did you have a major disagreement about the direction A-Inc or Gateway want to take (like just concentrating the Amiga technology for Set-Top Boxes, Consoles, and Vibrators) ? You won't break any NDA's by telling us the circumstances and leaving out the details.

Amiga Inc did not renew my contract. That is all I can say. I am pursuing my own interests, the development of an innovative, Kommunity owned platform, built, designed, evangelised and run by those ppl who work with it, in any capacity.

Is your US visa ok, so you won't have to leave your newborn?

I got it transferred back to my good old Canadian "pimp" who sells my services in the US. I may have something lined up, but we have been here four years, and no footy, crap beer and our kids getting wierd accents is starting to get to us. If we can get a job back in Scotland, we will be returning real soon.

The "Evie" incident relates to the fact that here in Pennsylvania, it takes months to get a birth certificate, and without it, we can't get her a passport so we can't take her out of the country. The "threat" of deportation was never a real threat. It was something off the cuff I told my wife, concerning an 'enemy' I had made at Gateway.

Jeff, on a personal level, is a great guy, and I had a lot of fun whenever I was up there, both with him, Mad Dog McEwen and his family. Him getting the blame for that wasn't fair.

What did you (generally) manage to achieve while you were project manager at A-Inc?

I *hope* I made them realise just how valuable a resource the Amiga community was at all levels. I talked to many developers and users, got to understand their hopes, their frustrations and made many friends.

What would you have liked to have implemented?

...what I'm doing now :-)

QNX... tell us more.

Great OS. Great ppl (Canadian). Real

fans of the community. The bosses both still code, and put technology over politics or management crap.

Is there going to be a new Amiga home computer released via A-Inc?

...you have to ask them.

Would you advise us to all go PPC, or an OS5Dev system (Amiga on a Pentium)?

Depends what you want to do. If you believe in the target markets and strategy of Alnc, then go that way. If you don't, then you have to decide what you want to do.

Take a look around at what you want, what you want to do, who you believe, who makes you barf and then decide.

Personally, apart from a few pain-in-the-ass things, which every computer has, I don't mind pc's. What I do mind is anything Microsoft. I wouldn't be happy to lose an Amiga entirely, but I could see myself getting a pc if it had a decent os, like our ancient Amiga one. What's your opinion?

It's all a matter of integration. Linux on a Pentium goes like the clappers. PCI and AGP graphics cards are amazing. I have a PC, I use it because it has most of my work stuff on it and in a format that I can use at home. My dream OS on my dream machine would be KOSH - to be honest, if what I saw on the screen did what I wanted, made me happy and immersed me into my virtual world then I couldn't care less what was in the box.

Do you see any reasons for users and developers to hang onto the Amiga dream any more?

Depends. What is the Amiga dream? Is it developing for Amiga Inc machines? Is it developing for PPC machines? The classic? Or is it developing for an innovative, empowering platform which allows you to sculpt virtual reality?

If yourself, Amiga Inc, Amiga Tech, developers, and users etc were football teams (real football, BTW, not that American padded 'rugby for girls' stuff :)), which ones would you be?

Everton at the moment - great players who just can't play together or win a game and had a lot of glory but now fight relegation all the time. Common sense tells you to live them but your heart is there so you carry on, just praying that it will all click.

You've begun a project with Dave Haynie, Gary Peake and others, called KOSH (if you call it BOSH! our chairman would be very happy... it's his catchphrase :)). As the song goes... "So what's it all about?"

KOSH is an attempt to build a commercially sustainable platform that is owned by the Kommunity, the ppl who use it, develop for it, sell for it and report on it. It has 3 parts. Kosh - the Kommunity, kOSh - the OS and kosH - the hardware templates. It started up after Alnc let me go, caused by the many thousands of mails I received in which developers, users, retailers and journalists vented - it became clear that many of them had just had enough of this boom/bust, bust, bust cycle of the Amiga. Now they want to build their own platform - not to own it, just to have a foundation on which to earn a living, build a community. Someone christened it the Insanity project which I kind of like because it is insane really. But you know what, there is just enough talent and frustration with computing in general at the moment, that we might pull it off.

Ppl have said why are you doing Linux all over again. That misses the point. Linux is a last generation OS that is free with no central focus, and it is hard to make money in it due to the GPL. Don't get me wrong, I like Linux a lot, but I want a real next generation, innovative OS which runs on the best HW or the cheapest HW, whatever suits my pocket at the time. Something that moulds around me as a user, that becomes my doorway into a virtual universe, that allows me to do almost anything as a developer - that gets out of my way and lets me have fun. But which also wants my opinions, that asks for my help, that calls me friend and lets me meet other friends.

Could turn out to be nothing but it could turn out to be everything. That is why I am going to put so much effort into it over the next 6-12 months. If any of your readers want to get involved, please do. The Kommunity wants as many ppl as possible to come, have a look around, see if they like what they see.

How can we, as users and developers, help keep the amiga viable? Or should we just give up and get a Siamese and run Amiga under Windows?

Again, what is the Amiga? What is it that we want to keep viable? Most of the systems today are a mass of third party products (HW and SW) with an old Amiga buried somewhere in the centre. The community, the users, the developers, the retailers and the journalists have kept "the Amiga" viable. What exactly is it that ppl are trying to save?

Find out more about KOSH at:

<http://www.kosh.net>

Gary Peake

So, what the hell happened with Fleecy? One minute he's our best link and shining miggy light (a lone voice in the fog), and the next thing we're reeling (not as much as Fleecy, of course) from the news he'd been sacked!?! Is it a case of Fleecy doing a monumental smeg-up ? A major difference of opinion on the direction of the Amiga ethos? A case of ego's gone wild? Or had he done his job so well (like Joe Torre) that they didn't need him anymore? (or all of the above, as nothing is ever so simple as to be blamed on one thing).

I have no idea. This is something between Fleecy and Amiga Inc I would presume.

Where does this leave os3.5? Jeff had already approved it.

I haven't heard anything yet concerning OS 3.5 except that it doesn't appear that the original team will be doing it.

What's this about KOSH? Is it KOSHER? (sorry, but was begging for it)

KOSH is about a dream a lot of people have had over the long term. This is NOT on of the projects I will be actively involved in however I always support any moves by the Amiga community which serves to help ourselves. I understand some very bright Amiga and non-Amiga minds will be involved however.

At least Fleecy's idea of a central Amiga web shoperama looks like going ahead, with OwlNet....tell us more.

Yes, Owl Net is a joint venture between Fleecy and myself to provide support for "open systems" users and developers across the board.

Owl Net is another dream come true for me. It will not just be a shopping mall, but also a place where non-Wintel platform people of all manner of OS lineage can come together for sharing and helping one another.

At the same time, Owl Net will be quite modular in structure so that Team AMIGA will have a full support area, linux, qnx, unix, and more will have an information portal, a developer and user support area of their own, plus general areas where all of us who wish can share our knowledge banks.

We will release some more information

shortly. We are currently involved in doing the set-ups and what have you to make it as functional as possible on opening.

Won't all this in-fighting lead to even more users becoming despondent and leaving for warmer climes?

MY OPINION

There is NO intention to cause infighting. And there is absolutely no reason that developers should not be free to pursue a project with the potential to keep them working, active, and making money until such time as Amiga Inc can release more information to them about OS5.

In any discussion with Fleecy, you will hear that KOSH is not about competition to OS5, but rather an effort to fend for ourselves until such time as Amiga Inc has something to offer. 18-24 months is both a long and short time depending on who you talk to.

OPINION OFF

Surely our last bastion of Amiganess at A-Inc is Dr.Havemose, who has a long and proud Amiga OS history?

Dr. Havemose is well credentialed and is very capable (with the right team assembled) to carry out the mandate he has accepted. No one should doubt that. Bill McEwen is also every bit as dedicated to the cause of making one heck of a product as anyone I know. I have great respect for both of them and wait with anticipation for word on what direction the platform will go.

QNX sounds like the best choice for an os kernal, eh? And at least there are a number of amiga-savvy engineers there (or is that just PR crap)?

QNX is a great choice. It is very "Amiga-like" in user friendliness. From a programming point of view, I am a lame duck, but most agree that it will be a refreshing kernel to work with. Randy at QNX told me that as soon as they knew it was a done deal, QNX people started setting up and talking about their Amiga's. And he also told me that the two most prolific coders they have are the owners ... apparantly both enjoy coding and still remember where they came from. Very refreshing to hear such news as this from inside QNX. I am delighted they were chosen as OS

Gary Storm speaks to the head of Team Amiga soon after the Fleecy announcement.

partners personally.

You've probably already answered this in the above questions...but what do you generally think of the Amiga now and if there is a future?

I have no doubt that Gateway has invested ample monies into bringing a product to market. I have no doubt of Dr. Havemose's and Bill McEwen's credentials and capabilities. I have no doubt about the dedication involved there and hope to see what we are all looking for soon.

Surely spreading the Amiga os around would be a good idea? Microsoft has made billions by spreading around an inferior OS and products associated with it (that's not just amigans talking, either, but most of the PC world). As long as the best power would be known to be squeezed from an Amiga os on an Amiga system, not a Pentium.

The problem has been for us the platform dependance we have on the Classic Amiga. Hard to spread an OS that requires a certain hardware and chipset. If Amiga Inc moves to a more "open systems" reference, I feel sure it will spur growth in our markets. QNX seems to have that capability.

Related to the above, it seems Intel is at last gathering the courage to free itself of Microsoft, as they recently invested in Red Hat, the company that distributes Linux, an alternative os. As we know, Billy boy doesn't like alternative os's, as they invariably point out how slow and buggy Windows is.

A lot of chip and box makers are looking for alternatives. Amiga Inc is poised to make inroads there with QNX and an "open systems" reference. We will have to see how it all plays out I think.

Finally (for the moment), what's the future for the many PPC users (like me)?

Well, as I said earlier ... 18-24 months (last timeline I have seen from Amiga Inc) can be a long or short time depending on whom you talk to. For the next generation (between pure Classic and the Amiga II), I personally think PPC is a great option. Note also the references to PPC on the QNX web site.



So, do you use a PC at home or work? Do you like it? More to the point, do you like using Win 9x? Didn't think so.

Of course, we all know Microsoft as being the force-feeder of Windows. Bill Gates was accused many years ago of ripping off the Apple Mac operating system. Bill replied that he actually took most of the idea's for Windows from the Amiga operating system.

Why are there so many people in the world that 'hate' Bill Gates and Microsoft? Could it be because most Microsoft products are so buggy? Yes, but buggy products are not exclusively the domain of Microsoft, or the PC. Could it be the hand-holdingly constricting interface? Or is it the way in which Microsoft has forced Windows and other products down the co's and users throats, callously disregarding freedom of choice, and actively using every dirty trick in the book to enforce those parameters on the world and kill off any competition. Absolutely.

Here is an excerpt from the internet: [Microsoft's greedy and dishonest ways of getting Market share can be shown by their operating system licensing agreements. Microsoft requires all PC clone makers to pay them a royalty even if there is no Microsoft software on it! Assistant U.S. Attorney General Anne K. Bingaman said this about Microsoft's devilish ways: "[Microsoft was] locking up the market with practices which every computer manufacturer despised and which the competitors despised you had to sell you soul and never leave Microsoft." Fortunately, The US Justice Department stopped Microsoft from these practices in 1994, but no penalty was put on the company, and undeniably too late in the game to reverse the damage already done. Another Licensing Agreement Microsoft has requires the first computer screen any user sees while the PC is starting up to have a message that Microsoft can pick and choose, such as "Where do you want to go today?" This means that every single PC that is sold, gives Microsoft a free advertisement to promote their product. Antitrust attorney Gary Reback says: "This is as though every time you turned on any television set it had to start up on NBC, offered easy connections to MSNBC and other wholly owned sites and you had to reprogram the VCR to get CNN or anything else." No-one seems to like what Microsoft is doing, but Microsoft knows that no one manufacturer can stand up and not allow it because of Microsoft's sheer size.]

Microsoft had been sued by Apple over copyright theft, where code from Apple's Quicktime software was pirated and used in

M\$'s Video for Windows 1.1D. That miraculously vapourised when Bill bought a private share of Apple.

Netscape has had to be offered free as an attempt to survive Microsofts strategy of giving away Internet Explorer (aka Internet Explorer) for free.

Microsoft have a stranglehold on not letting any PC's be sold with anything but I.E. This recently changed slightly, with the U.S. Justice Dept. ruling that Microsoft couldn't bundle I.E. with new PC's. Microsoft has ignored this, claiming that IE is integral to Windows '98, and that Windows can't operate without it!

This has obviously been refuted by most non-wintelians:

[As most of America has heard (and as much of the technical world is tired of hearing), Microsoft is attempting to defend itself from allegations of wide array of anti-competitive behavior. In defiance of a recent court order, stating that Microsoft must refrain from distributing Internet Explorer Web Browser with its Windows operating system, the Redmond WA software company stated that removing Internet Explorer would render Windows inoperable. Translation: Microsoft wants everyone to believe that some vehicle of computing (their operating system) will cease to function without a communications device that can be included with it.

Removing Internet Explorer could not possibly render Windows inoperative, because you'd have to leave those software components other applications rely upon. Just as you can't argue that to remove a car stereo means removing the battery, you can't argue that removing such an application - even one such as Internet Explorer - involves removing all the software components it depends on. In fact, PC Week proved just that: [A Techweb article ("Windows 95, IE Are Separate Products, Test Says") makes these claims, which dispute Microsoft's arguments in federal court. [Microsoft officials said IE 3.0 is an integrated component of the Windows 95 operating system, as shipping in OSR version 2. . . PC Week Labs' tests have shown that this is not the case. . . . We merely modified four lines in one of the Windows 95 setup files to prevent IE 3.0 from installing. This modification had no impact on the operating system's capabilities or performance. . . . Moreover, significant OSR 2 features, like the FAT32 file system, remained intact using our modified install program. Microsoft would likely disagree, but our experience with Windows 95 and recent tests of Windows 98 show that the operating systems are much better suited for corporate deployment without the browser.]

[Microsoft has stolen many ideas and

products over the years. Microsoft stole the basis for Microsoft Internet Explorer from Spy Mosaic. Spy took on the huge company, and won. - \$8 Million in damages. - Nothing in the never slowing big computer industry. The server code for IRC (Internet Relay Chat) from the General Public License allows the source code to be freely distributed but only on the terms that the source of the new application also be free. Microsoft's Normandy Chat Server is not free. Microsoft used the 16-bit OS/2 code to form the basis of WindowsNT. IBM and Microsoft jointly made OS/2, but Microsoft left the project early and have since publicly declared OS/2 to be dead. This means that their use of the code is essentially theft.]

The latest, and most dangerous ruse to force Microsoft Windows 98 onto the world is to add a propriety extension to html code, which means that M\$ sites aren't accessible unless you use Internet Explorer. The latest Internet Explorer can't run without Windows 98. Companies who have to deal with Microsoft are forced the Win'98/Explorer route. Their customers in turn are forced the same way. Can you see a pattern here?

Dave Haynie is an ex-Commodore engineer, who is now the Vice President of PIOS Computers. Dave has a better insight into M\$ tactics than most.....

["The way Microsoft builds their empire is by stressing, but not to the breaking point, as many interdependencies as they can create. The OS was the starting point. They get every PC maker buying their OS, rather than another, by making it financially impossible not to. Next, they do the same with the office suite. This, in turn, hooks countless users and companies on Office. Since they make as much from upgrades as OEM sales (or more), it's important to force the upgrade of Office. So they change file formats with the new version. New PCs come with the new version, so users editing the old stuff write out the new file format. This, in turn, forces folks to upgrade to the new office suit. Every now and then, they drop support for the old OS, so you have to upgrade the OS to use the new things (which, of course, you really

didn't want in the first place). Now the internet is the issue. MS knows they have 94% of the OS market and 85% or more of the office automation market, but only 35-40% of the browser market. So they make the browser part of the OS (thus taking along anyone who upgrades to the new OS), but also make things difficult for people looking to get other free forms of

support, such as the upgrades page, without their latest Web browser. They can't exactly yell at you for using Netscape (at least, not with today's legal heat), so they make it an Internet Explorer issue. Expect it to get worse - their ultimate goals is to dominate the Web such that it's propititized, at best, or that non-MS browser users, like non-MS OS users, are rendered second-class citizens on the net. Labelling enters in here, for third party products. If you're a hardware vendor,

you have to meet MS's PC9x specs, once they take effect, or you can't use the Microsoft logos on your box. With hardware and software, same deal. So even here, it becomes a Web browser issue, since Windows 98 uses a private format for help files, some sort of compressed HTML that only IE4.x can read. If you don't distribute your help files in this format, you don't get the logo. If you don't distribute Windows 98 drivers, you don't get the logo. All perfectly legal, but it goes beyond that. If you don't get the logo, you're treated as a hostile, unofficially of course, and as a developer, you don't get proper support - your questions magically wind up at the end of the priority list, etc."]

To illustrate the above, an excerpt from a ZDNet article:

[A group of computer and telephone companies charged on Friday that Microsoft was using "extortion" in its battle with Netscape Communications Corp. for dominance in selling browsers for the World Wide Web. Edward Black, head of the Computer and Communications Industry Association, said Microsoft, whose operating system is used on 90 percent of personal computers, was telling computer makers they must use its Web browser "or else." "It has elements of extortion," Black told reporters at a news conference.

The association includes AT&T Corp., Sun Microsystems Inc., Amdahl Corp., Bell Atlantic Corp., SBC Communications Inc., Tandem Computers Inc. and Nokia Telecommunications.

And.....[Compaq claims that Microsoft threatened to terminate Compaq's license for Windows 95 if Compaq shipped its computers with Netscape Navigator in place of Microsoft Internet Explorer. Compaq is Microsoft's largest customer for Windows 95. Gateway 2000, Inc. and Micron Electronics have made similar allegations.

Short excerpt from this Excite News article: Compaq's director of software procurement, Stephen Decker, said in testimony to the Justice Department that if Compaq chose a Netscape icon over a Microsoft icon on its desktop computer screen, then "Microsoft would terminate our (Windows 95) agreement for doing so."]

From a PC Week article: [Several PC makers are charging Microsoft Corp. with wielding its operating system dominance in an attempt to push Internet Explorer to the top of the browser market. Two said Microsoft has threatened to re-evaluate Windows 95 licensing fees if competing products, namely Navigator, are bundled on their systems.

"This is not right," said Brad Chase, vice president of Microsoft's Internet Platform and Tools Division, in Redmond, Wash. ". . . The

allegations are just not true." Some PC makers, however, told a different story, although all requested anonymity due to fear of reprisal from Microsoft. "We thought our [licensing] fees would decrease if they removed IE, but they said they would increase, so we kept it on," said an executive at another OEM.]



But even Microsoft devotees need to be careful:

[More bugs have surfaced in Microsoft's internet products and, unlike most of the others, these have not been fixed. Short excerpt: Flaws in the security of Microsoft's internet products allow malicious hackers to steal users' private encryption keys and impersonate their victims, security experts said.

The flaws are so serious that one expert advises users not to surf the web until a fix is found. . . . Private encryption keys can easily be stolen from the hard disks of machines whose users are surfing the web, thanks to flaws in several Microsoft products including the Internet Explorer browser and the Internet Information Server package.

"As a result of these flaws, no Microsoft Internet product is capable of protecting a user's keys from hostile attack," [security expert Peter Gutmann said.]

Microsoft practices are highlighted in these two excerpts from Justice Department files:

[Internal Memo from Microsoft's Christian Wildfeuer, February 24, 1997 (submitted to court by US DoJ on May 18, 1998) "It seems clear that it will be very hard to increase browser market share on the merits of IE 4 alone. It will be more important to leverage the OS asset to make people use IE instead of Navigator." That's why Microsoft "integrated" IE4 in Windows98.

M\$ has been trying their best to kill or warp Java, as it's cross-platformability is a threat to Windows monopoly.

A document that confirms this point: "Screw Sun, cross-platform will never work. Lets move on and steal the Java language. That said, have we ever taken a look at how long it would take Microsoft to build a cross-platform Java that did work? Naturally, we would never do it, but it would give us some idea of how much time we have to work with in killing Suns Java." Exhibit 97 (MS7 026935), P. Sridharan 9/17/97 e-mail]

So are we all destined to be forced off the net, or be Windows clones?

The Anti-M\$ movement is growing at a fast rate: [Netscape and others are challenging Microsoft . . . and reportedly are requesting an antitrust investigation by the Department of Justice, a process that takes years under the best of circumstances. . . . The courts take too long. Show Microsoft how you feel in a way it understands: Keep your money. -

Eamonn Sullivan, PC Week Magazine]

In America, 27 States attorney generals have spoken in support of the Dept. of Justice's investigations into M\$, filing an amicus brief in the Federal Appeals Court of Washington D.C.

Like most of the other online polls that have been taken, a C|net reader poll found that public opinion is on the side of the U.S. Department of Justice in its lawsuit against Microsoft. These polls certainly conflict with Microsoft's claims that it has simply been responding to overwhelming consumer demands. Short excerpt:

"It has been awhile since antitrust laws were used for the benefit of consumers and consumer choice. This may be one of the best examples of these laws being used for the good of technological advancement and consumer interests," wrote Mark D. Slosberg, president of Net Information Systems. "The issue is predatory pricing and eliminating choice, and the Justice Department is taking a strong and important stand."

From a 'Tech Investor' article: [Microsoft has been ravaging the Internet industry with anti-competitive behavior; behavior that is effective only because of Microsoft's monopoly position - I believe this is illegal and it is not good. . . . About a week ago, Netscape filed a request with the Department of Justice for an investigation of both antitrust behavior and a violation of a 1994 consent decree forged in U.S. vs. Microsoft. . . . I expect that as the facts surface, Netscape, for all of its faults, will be recognized by the Internet community as a benevolent innovator and leader, whereas Microsoft will be shown to be an outsider that has coercively been forcing its way on an exciting, emerging, and new industry, community, and world.]

Recently, Intel has invested in Red Hat, the distributors of Linux, and Dell Computers have offered to install Linux for new customers. The M\$ chains are breaking, and the new Amiga that is on the horizon will be in a prime position (with it's 'strategic partners' aka PC co's) to usher in a computing age of world freedom with compatibility.

Gary Storm



The articles quoted are copyrighted as follows: PC Week, PC Magazine, and MacWeek articles copyrighted by Ziff-Davis Publications. Tech Investor and Computer Reseller articles copyrighted by CMP Publications. InfoWorld article copyrighted by InfoWorld Publishing Company.

Scoring System

Reviews are very subjective, what one reviewer may love, another hates. Such is life. So we decided to have a general score, which the reader can take into account along with the text.

So we invented the fish...it's easy to work out which we feel is a better product... the more bones that show, the smellier the fish :). We also feel that in the % system too many products get "Gold" or similar awards, even if they have a fair bit of room for improvement. Thus we are only awarding Caviar to products that are practically perfect.

Caviar

The best so far ! Can hardly pick anything out of it, not even boogers. Rarer than Nessie.

tasty

This product is definitely worth buying but, like most things, still has room for improvement.

FISH FINGERS

Average, neither too good nor too bad — it works but there are areas which need major improvement or are way behind competing products.

SMELLY

Crap, but hopefully getting better in future versions (if there are any).

ROTTEN

Disgusting, multicolour yawn inducing abomination that insults the Amiga.

Blizzard PPC 603e+

Mick Sutton plugs the fastest ever accelerator into his A1200, is it all plain sailing on the PPC? (sorry!)

Up until recently I thought my Amiga set-up was ok... an A1200T with a 40Mhz '040, and SCSI via the squirrel interface. Not a bad setup, but due to the CPU intensive software I'm using (Art Effect 2.6, Cinema 4D, Quake etc...) I thought it was time to upgrade.

I looked at many options and decided to go for the PPC route, mainly due to the fact that I could upgrade nearly every aspect of my system in one purchase. Also in my mind was the near release of the BVision graphics card, which at the end of the day will be the ultimate gfx card available to A1200 owners. I decided to purchase the Blizzard PPC 603+ 240 Mhz with an '060 fitted. The card I chose was the top of the range (and expensive) because if I was going to upgrade I might as well get the max.

I ordered the card from White Knight in early July '98 but due to the lack of '060's available I had to wait until mid August '98 for it to arrive.

To use the board the first thing to do is install the '060 software (this must be done before installing the hardware) which is done using the standard installer. The software which integrates the PPC into the system is on an upgradeable Flash ROM fitted to the board, unlike the Cyberstorm PPC (for the A3/4000) software which must be installed on your hard drive.

Product Information

Developer: Phase 5 Digital Prod.
WWW: <http://www.phase5.de>
Distributor: White Knight Tech.
Tel: 01920 822321
WWW: <http://welcome.to/white-knight>
Price: £200 - £600 approx depending on config.
Reviewed: £609

I was very impressed by the quality of the board (as with all Phase 5 boards). The card is so closely populated with components it's just amazing that they got it all onto a board of such size (the PPC board is actually smaller than my old Apollo '040), when you consider that you've got the PPC CPU, heatsink, fan, '060 CPU, two SIMM sockets and fast SCSI-2 controller in such a tight space.

The board was very easy to fit, simply slotting onto the motherboard edge connector. In fact the compact size made it a lot easier to fit than my previous board. At first I was worried that such a complex card would melt, even in my tower! The board only has a small fan to cool the PPC and nothing to cool the '060, however the '060 runs very coolly anyway and the PPC fan seems more than adequate as the board never gets more than warm to the touch.

One of the SIMM sockets on the board lies flat and the other is mounted at an angle. When I tried to fit my double sided 32Mb SIMM in the flat socket it wouldn't fit snugly due to some pins sticking out of the board. In the end I gave up and fitted it in the angled socket which was OK, and by the way - a matched pair of SIMMs is not required by this board which was a relief as I only had one.

To use the fast SCSI-2 on the card I had the insight (actually Robert Williams our vice chairman told me) to purchase the adaptors and cable required to match up to my existing SCSI hardware. On the board there is a non-standard 50 pin high density header which connects via a short ribbon cable to a high density 50way 'D' connector designed for an external port. To connect to the internal SCSI devices in my tower I needed a 50 way high density plug to Centronics socket adaptor, and a 5 device SCSI ribbon and a crimp on Centronics plug which I bought at Maplins at a cost of about 25 quid. A suitable custom cable is also available from White Knight for about £30.

Once the board and SCSI cabling was in place and connected, it was time to switch on my machine.

It was at this point that I encountered problems, on bootup a SetPatch command fail occurred and the machine hung at the grey shell prompt... worrying! As luck would have it this problem had occurred to other purchasers (if you call that luck!) and a fix was available which Robert found out about on the Internet. If I hadn't had internet access (albeit indirectly) I wouldn't have been able to solve the problem without phoning White Knight as it wasn't mentioned in the manual. The fix was to edit the SetPatch line in the startup-sequence to the following:

Run >nil: C:SetPatch Quiet

As soon as I'd made this change the Amiga booted properly into Workbench, when I started using the Amiga I noticed how fast everything was. This speed increase was due to the '060 which is about twice as fast as the '040/40Mhz that I had been using. The PPC side of the board is only used by software specifically coded for it, the PPC does not degrade the performance of the '060 and software can be written so it uses

the PPC for processor intensive tasks only.

It is at this point that you want to start using the PPC enhanced software, but I have to say that at the moment there is little quality software about, but lets hope that this situation will change soon. Some of the titles that are available include: Tornado 3D - a very polished product indeed; Turboprint - which only marginally increases print speeds; Candy Factory Pro; Fantastic Dreams; ISIS (an MPEG video player); and many smaller utilities.

My SCSI CD-ROM was recognised by the SCSI controller on the PPC board and worked as soon as I changed the device line in the

DOSDriver file to point to the new bliz-zppc.device. However

I soon discovered that although normal data CDs worked, only the first session of multisession CDs such as PhotoCDs could be accessed. Another trip to the Internet was called for, and this time the culprit turned out to be the CD-booting feature built into the Phase 5 SCSI ROM. This feature allows the machine to be booted from CD-ROMs (such as a Workbench back-up,) but to do this it has it's own simple CD

file system which overrides whatever is installed. To make the original CD file system (in my case AmiCDFS) take over you have to add the following line to the DOSDriver:

FORCELOAD = 1

After this my CD-ROM was back to normal, in fact it was faster than before and I noticed that accessing it didn't slow other applications down. This is because the Blizzard PPC SCSI controller is DMA (Direct Memory Access), which means it can transfer data into memory without using the CPU. My old Squirrel controller wasn't DMA and thus tied up the processor while transferring data. Since I've had the Blizzard PPC I've tried another CD ROM and my Yamaha CD burner on the SCSI and they both worked well. In fact I can burn CDs even whilst playing Quake!

Now I've got the few problems ironed out I find the Blizzard PPC a very reliable upgrade. None of the software that ran on my '040 stopped working on the '060 and most things got a very useful speed increase, helped by the improved SCSI performance. I'm waiting for some useful PPC enhanced software to be released at a reasonable price, so come on Clickboom and all the others!

Since I wrote this review I have received my BVision graphics card and after adding a hard drive it's the best thing I ever did for my Amiga. Read more about the card in the News section and we'll have a full review next issue!

Second Opinion

I'm not a techie. I don't have cables and diodes crawling out of my cavities when I'm near anything electrical (as far as I know), and my understanding of 'electricrery' isn't brilliant. I'm just a user who can barely fix the toaster. I upgraded to the PPC because I needed two things: scsi (for the cd-rw), and a graphics card. The '040 and PPC were just a bonus, and weren't much more than if I had bought a scsi kit and graphics card set up (like the ateo-bus) anyway. As to what I think of the ppc, I must admit I haven't had much of a chance to use the PPC side, except for so-called 'illegal' Quake ppc ports and the brilliant 'Candy Factory Pro'. I'm quite excited by the PPC side of things though, as there are enough programs out now to do with graphics, music, and games, to justify it. And there are many more on the way.

As to the Bvision... Wow! What a difference a gfx card makes :) It doesn't feel like the poor cousin to a P300 anymore:)

My opinion of PPC is that there are a lot of developers (except ClickBoom - Booo!) developing for it at the moment, and we'll see the fruits of their labours soon. Amiga Inc has given it a boost with OS3.5 and PPC things being included, and at the end of the day it's practically the most powerful miggy you can have. If you wanted to upgrade to an '060 or '040 and graphics card, then I'd say it makes more sense to buy the PPC while you're at it, for not much more cost than the rest would normally be.

Gary Storm

Results

Pros

Fast 68060
 Fast PPC
 Fast DMA SCSI!!
 BVision graphics card option.

Cons

High spec. boards Expensive.
 Poor documentation and support.

tasty

PPC - Why Bother?

Thomas Hurst the webmaster of AmiSite, a popular PPC website, updates us on the latest PPC software available...

It's been over a year since PowerPC cards became available for Amiga users, and we could finally put a processor in our machine that was able to compete with the likes of the Pentium. Many were adamant that it would revolutionise Amiga software. A year down the line, where did this revolution go? Is PPC still waiting to provide us with a wealth of new Amiga software, or has it just become yet another 'techno tragedy'?

Well, right now the estimated PPC user base is around 8,000, and things are just starting to look interesting. Lets take a look at some of the apps available now.

Probably the most heavily used (if a little boring) use for the PPC is in datatypes - the well known and oft updated AK Datatypes come with PPC versions for JPEG, PNG, TIFF and a few other formats (although not GIF, due to licensing problems). With these, the raw power of the PPC is obvious - a full screen JPEG can be decoded almost instantly. They are shareware, so unless you pay a fee of about £5 for each one

you will only see every other line decoded by the PPC. The AK datatypes are available on most AFCD's and Aminet.

Continuing the graphical theme, Candy Factory should need no introduction to web masters - it is a powerful graphics package aimed specifically at creating good looking logos with glows, shadows and textures. The recently released 'Pro' version provides a lot more speed and features. Candy Factory really benefits from a PPC and a graphics card (in my case, a brand spanking new BVision I'll talk about later), which allow for real time updates - e.g. you can drag a lightsource about with the mouse and see everything change, like the effects you see in scene demos, only useful.

The PPC is very well suited to 3D rendering, and packages such as Tornado 3D and the recently released PPC version of Imagine make full use of it's speed. With software like Warp 3D (a programmers interface for 3D specifically aimed at hardware acceleration ala Microsoft's DirectX), we can expect real time previews in future versions for those of us lucky enough to have a card with 3D capabilities.

Most of us are probably under the impression that sound couldn't possibly benefit from a fast processor, but you'd be wrong. The most obvious example of this is with MPEG Audio, namely MPEG Layer 3, better known as MP3. MP3 is a highly compressed audio format that has revolutionised music distribution on the Internet - a CD quality audio file can be compressed down to a tenth of it's size with no dis-



AmigaAMP - CD Quality sound from the Internet

cernable loss of quality. But as you might imagine, this compression isn't cheap in terms of the processor that does it, so this is a place where the PPC excels.

The popular mpeg.library is now available in a PPC version, meaning any software which uses it, such as Songplayer, MPEGa and many others, automatically benefits from the PPC. Amiga AMP is another popular player based on AMP on other platforms. This has the ability to use "Skins" (replacement GUI's), meaning you can either have a very plain Gadtools version, or a bright, psychedelic one to blend in with your Workbench.

All these players can decode a full CD quality MP3 using only about 20% of the power of the slowest PPC on the Amiga - a 166MHz 603. And as it barely keeps the 68k ticking over you can happily render that huge Lightwave scene without worrying about slowing it down... at

Serious Fun!

A list of some of the more interesting looking PPC games on the horizon:

- Explorer 2260 - Promises to be the best space trading game since Elite, on any platform.
- Wipeout 2097 - The Playstation hit comes to the PPC.
- FUBAR - A(nother?) real time strategy wargame, although as the developer can't afford a PPC card...
- The Settlers II - the sequel to the well know Settlers
- Claws of the Devil - Some sort of Tomb Raider clone
- Total Combustion - Drive about and blow things up

least until a PPC version becomes available.

Encoding is the Holy Grail of MPEGa, and it requires a lot more power than playing. Even so, it is still possible to encode a CD quality sample on the PPC without having to set it off a week before you need it, although you might want to go and make a cup of tea if you have a long sample to encode.

Enough of the Serious Stuff!

Thanks to it's fast FPU, the PPC is well suited to 3D style games, but a lack of good developer tools, documentation and an official kernel has crippled development so far.

Luckily, thanks to Amiga Inc's decision to integrate WarpOS with OS3.5, it looks like PPC gaming is really about to take off.

It's ironic that the most played PPC game on the Amiga is probably the well publicised illegal Quake port. Now into it's tenth incarnation, it is very fast (although it could be faster), reaching an average of 20FPS on a 166MHz 603 and AGA, and a bit more on a GFX card. It also supports Total Conversions and on-line Quake, and despite still being a bit unstable with on-line play and on exit, it's still far more playable than the 68K version.

I Have a Vision...

Both the BlizzardPPC and the CyberStormPPC come with a custom slot for a GFX card - the BlizzardVision and CyberVision. These cards utilise the Permedia 2 chipset - one of the better chipsets on the market today with good 2D performance, and excellent 3D capabilities - in excess of those of the Playstation. The recently released Warp3D promises to provide easy access to these fast 3D functions for programmers, so we can expect the likes of Wipeout and Explorer 2260 to be able to fully take advantage of them. Unfortunately we have yet to see a Warp3D driver for either board, but we should see something soon. The boards themselves are excellent GFX cards, despite not having much support for their 3D functions. I am using a BVision now, and all I can say is GET ONE!

CyberVisionPPC

The CyberVision PPC is a graphics card which plugs into a dedicated slot on Phase 5's CyberStorm PPC accelerators for the Amiga A3000 and A4000. As the card is fitted away from the outer shell of the computer, the video connector is on a small separate PCB attached to a blanking plate, which is connected to the main board by a flying lead. The specifications of the CVPPC are far in advance of any other current Amiga graphics card, as it uses a 3D Labs Permedia 2 graphics processor, which has both fast 2D and 3D graphics acceleration. The card also has 8Mb of fast SGRAM allowing the use of very high resolutions at high refresh rates. For all the high specs, lets find out how it stacks up in real use...

Fitting the CVPPC while the PPC card is in the A4000 is quite tricky due to lack of space. Basically all that is needed is to push it into it's slot but it is hard to be sure the card is properly seated, especially as you can't push on it evenly as the connector is at one end. Once the card is installed it is then connected to the SVGA output board via a flying lead about 20cm long. In the A4000 the board sits right next to the Zorro riser card. On the back of the riser there are sharp pins which could contact with the back of the CVPPC if it wasn't protected. To protect against this Phase 5 supply a paper insulator. I found after only a few weeks the riser pins had nearly come through the paper, so I replaced the insulator with a stronger one made from laminated plastic, which is a big improvement.

The board uses the tried and tested CyberGraphX driver system. As this is discussed in depth in the Graphics Cards feature elsewhere I won't go into it here, suffice to say that it works very well. Speed wise the card is noticeably faster in normal operation than my previous card (a CyberVision 64), window redraw seems more "snappy" and scrolling is smoother. Another benefit is that I can now use higher resolution screens in high colour (due to more RAM) and at better refresh rates.

The CVPPC does have a couple of problems which detract somewhat from its high specification: The first is that the flying lead does limit the quality of the

screen image, which is slightly softer than the CV64. The second problem is that the card has no scandoubler or monitor switcher built in so you can't easily view standard Amiga modes on the same monitor as the graphics card. I was lucky that my 17" SVGA monitor (an Iiyama Vision Master) has two sets of inputs and allows you to switch between them from the front panel, I connected my scan-doubled Amiga output to one input, and the CVPPC to the other so I can easily switch between them with a couple of button pushes.

At the moment there are no drivers available for the 3D acceleration features of the Permedia 2. Haage and Partner have released Warp3D which will support all the Amiga 3D cards available (CVPPC, BVision, CV643D and Picasso IV Voodoo module). The CyberVision PPC driver for Warp3D is currently in beta testing.

Conclusion

If you don't have a graphics card or you've got an older card like a Picasso II or GVP Spectrum, the CyberVision PPC is an excellent upgrade. It's fast and cheap (£149) by Amiga graphics card standards. However if you already have a faster card like a CyberVision 64 the choice is less clear, as the CVPPC is faster but it won't blow your socks off. Until 3D software becomes available it's impossible to know whether the 3D acceleration on the board will make it a worthwhile upgrade. If you own a Picasso IV I wouldn't change to the CVPPC. By all accounts the PIV is only slightly slower and has the advantages of a scan doubler and many optional modules. Hopefully the 3D aspects will be covered by the 3DFX module Villageonic are planning.

Robert Williams

Results



Candy Factory Pro exploits PPC and graphics cards

Graphics Cards

Explained

A graphics card is one of the most sought-after additions to any Amiga. Robert Williams explains the pros and cons of these add-ons and how you can add one to your Amiga.

When the Amiga was first released its multimedia (and this was before the word had even been invented) capabilities set it apart from the crowd. Full colour graphics and animation with sound and the realistic HAM modes amazed the world. Over the years competing systems improved and in the last 5 years the very abilities that made the Amiga a success are looking very tired. Funnily enough the operating system which was hidden away in Commodore's advertising (such that it was) has stood the test of time much better in many respects.

Anyway back to the plot... what many Amigans are looking for is a way to improve their Amiga's display. As usual many innovative Amiga hardware companies have taken up the challenge and produced a wide range of add-on graphics cards for the Amiga. Most of the cards are based on standard graphics processors originally intended for the PC market. The Amiga boards have to adapt these chips for the Amiga's Zorro system or other custom

bus and supply software to redirect Amiga displays to the graphics card.

The first cards to appear were simply 24bit display devices these basically allowed pictures and animations to be displayed in true colour but did not allow Workbench and other programs to use the hires high colour display unless they were specifically written for it.

Typical cards of this type were the OpalVision and the Harlequin. The second generation of cards allowed Workbench and programs not designed to use a graphics card to be retargeted to their screens. Each card used different custom software to achieve this and programs that wanted a 24bit display had to be coded for a particular card. Many of these cards are now supported by Picasso 96 and CyberGraphX allowing them to run modern software.

Finally, in 1995 Phase 5 released the CyberVision 64, this was a real breakthrough in more ways than one. Firstly it is a fine graphics board with 4Mb of display memory and a fast 64bit graphics processor. More importantly it came with the CyberGraphX software which instead of being proprietary to one particular card could be extended to cover almost any graphics card (and in fact now supports almost all the cards available). This meant that programmers now only had to support one standard – CyberGraphX – and their program would

lead to a boom in software supporting true colour displays, and now almost all Amiga graphics software can take advantage of a graphics card. CyberGraphX also provides retargeting of most OS compliant programs to a graphics card and because it is regularly updated even owners of older cards benefit up-to-date drivers. CyberGraphX has become the de-facto standard for retargetable graphics on the Amiga.

More recently a challenger to CyberGraphX's dominance of Amiga graphics card software has arrived in the form of Picasso 96 which Village Tronic released in conjunction with their Picasso IV graphics card. Like CgX, P96 supports most Amiga graphics card although there are a few cards only supported by one system or the other and some which aren't supported at all. P96 is compatible with almost all software written for CyberGraphX version 2 API (Application Programming Interface – an interface used by programs to communicate with each other); most software with 24bit support uses this standard as

it gives the widest compatibility. P96 and also has its own API but this is little used as the CyberGraphX API has a much wider user base (P96 and CgX users).

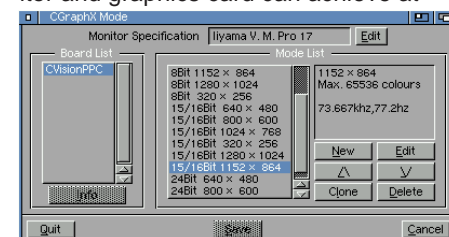
In general the two driver systems seem to be pretty similar and it's mostly a case of personal preference which you decide to use. There are a few graphics cards where one driver is preferable, on the Picasso IV the supplied Picasso 96 driver is said to be better than the CyberGraphX one and is compatible with the add-on modules for example. Both drivers used to be provided free of charge however starting with the newly released version 4 CyberGraphX has become a commercial product selling for about £25. Picasso 96 is now shareware and costs 30DM (about £10) to register.

It is very important that when you buy a graphics card you make sure it is supported by either Picasso 96 or CyberGraphX or you won't be able to use modern 24bit software with it, only the specially written software for your card.

Monitors

Because they are based around standard graphics chips Amiga graphics cards work best with a standard monitors rather than at video resolutions. In many ways this is a good thing as you can go out and take your pick from the many high quality monitors at bargain prices available in the PC market. A decent monitor allows you to view the screen clearly and because they have high refresh rates you won't notice any flicker.

As a guide on a 14 or 15" monitor a comfortable display is probably an 800 x 600 pixel resolution, on a 17" 1024 x 768 is common. Depending on the quality of the monitor and your preference you may be able to use higher resolutions. To get a flicker free display you should make sure your monitor and graphics card can achieve at



CGraphX Mode (part of the CyberGraphX package) allows you to define screenmodes that get the most out of your monitor.

least a 75Hz refresh rate in your chosen resolution. One very useful aspect of both CyberGraphX and Picasso 96 is that you can use a preferences program to alter existing or define your own screenmodes. This means you can create modes that get the very best out of your particular monitor. Both the systems come with a good set of defaults to get you started too.

The Software

Graphics cards that are supported by CyberGraphX and Picasso 96 integrate pretty seamlessly into the Amiga environment. Workbench and most other programs that allow you to pick their screenmode can be run in all the resolutions available. Unless a program is designed to use 16 or 24bit graphics card modes it will only have a 256 colour (if it was designed for AGA) display even if you run it in a 16 or 24bit graphics card screenmode. However you can run several AGA programs on one 16 or 24bit screen and they won't "steal" colours from each other.

Both Picasso 96 and CgX will allow you to have a 16/24bit Workbench screen so any programs that run on the Workbench can take advantage of the true colour display. Both systems patch Workbench so you can use 24bit background images on the Workbench and in windows. There are also 24bit datatypes that give much better results in CyberGraphX aware applications.

Programs that don't have a screen mode requester can often be made to open on a graphics card screen using a screen promotion commodity. Several of these programs are available on Aminet. Screen promoters run in the background and pop-up a requester every time a program tries to open a screen, in the requester you can choose to leave the program alone or force it to open in another screenmode (for example a graphics card screen). When you're happy the program runs well on it's new screen you can save the setting so that every time that program tries to open its screen it is forced into the mode of your choice transparently.

Some programs that access the Amiga graphics hardware directly, particularly games, cannot be made to work on a graphics card. In this case they can still be used with the standard Amiga video output. There are a couple of problems

Jargon Buster

Retargeting

Showing Amiga screens on a device other than the Amiga's custom chip-set e.g. a graphics card.

Display Memory/Video RAM

The memory on a graphics card used to hold the current display on the monitor screen. If you have several screens open at once they will all be held in the display memory until it runs out, then they are held in Fast RAM.

Screenmode

Defines a particular display, this includes the resolution, number of colours and the hardware used to generate the display.

Display Database

The list of screenmodes available on a particular Amiga, you can see this list in the Screenmode preferences editor.

Zorro

The type of expansion slot fitted to big box Amigas like the A2000, A3000 and A4000. You can add Zorro slots to A1200 using a bus board from companies like Micronik and RBM; these bus boards require a tower to house them. There are two types of Zorro slot, Zorro II is a 16bit slot fitted to the A2000 and A1500, most A1200 bus boards are also ZII. Zorro III is 32bit, much faster and was fitted to the A3 and 4000s. ZII cards can be used in ZIII slots but not vice versa.

True Colour or 24bit Display

The colour each pixel in the display is described with 24bits of data enabling a palette of 16.7 Million colours to be displayed. This is enough colours to display photo-realistic pictures.

High Colour or 16bit Display

The colour each pixel in the display is described with 16bits of data enabling a palette of 65 thousand colours to be displayed. Most images will be photo-realistic on a 16bit display but you can sometimes notice banding in smooth gradients.

Refresh Rate

The number of times per second a monitor's screen is updated.

Contacts

Software

CyberGraphX

<http://www.vgr.com/cybergfx>

Picasso96

<http://picasso96.home.pages.de/>

<http://www.picasso96.cogito.de/>

Hardware

Ateo Concepts

<http://www.ateo-concepts.com>

White Knight - (01920) 822321

Phase 5 Digital Products

<http://www.phase5.de>

Blittersoft - (01908) 261466

Power Computing (01234) 851800

White Knight

Village Tronic

<http://www.villagetrionic.com>

Blittersoft

with this, firstly as your graphics card is plugged into the monitor how are you going to see the output and secondly most Amiga screenmodes are not usable on an SVGA monitor that you'd probably choose to use with a graphics card.

Some graphics cards do nothing to help you here so you'd need to have a second monitor for your Amiga output. If your monitor can display both Amiga and graphics card modes you could get an external monitor switch (which can degrade the display quality) and if your monitor can't you'd need a scan doubler and a switch. Many other graphics cards have a passthrough for the Amiga signal, this means you connect your Amiga output to the graphics card and the graphics card to the monitor. When you switch to a standard Amiga screen or boot from floppy to play an old game the Amiga signal gets passed through to your monitor. Because the Amiga signal is not altered you'll need a multisync monitor that can handle the Amiga modes as well as graphics card modes (Amiga 1438 or 1701 for example) or a scan doubler that allows standard Amiga modes to be used on an SVGA. The third and best choice is a graphics card with a built in scan doubler, these cards plug into an Amiga with a video slot and take Amiga video from the s

If you only use application software you'll probably be able to get away without access to the standard Amiga modes as practically all applications

from 1992 on can be used on a graphics card screen, many older ones can be promoted. I used my Amiga for over a year with no access to Amiga screens however I eventually bought a scan doubler because I missed watching demos which can't usually be promoted.

Benefits

A graphics card will enhance almost everything you do with your Amiga. Even mundane activities like Workbench become much easier and more pleasant when you have plenty of resolution and colours to play with. Graphics card screens don't use any chip RAM so you can stop worrying about running out and fully utilise the Amiga's excellent multi-tasking. Graphics card screens are also much faster than AGA, on most cards a 256 colour graphics card Workbench will be faster than an 8 colour AGA one and a 16bit one will be very usable (way way faster than 256 colour AGA and in higher resolutions to boot). If you get a graphics card you may find you need to upgrade your Fast RAM because the software uses Fast RAM to hold screens that are not being displayed and to buffer the main display. Also if you start using graphics programs in higher resolutions you'll almost certainly start to create bigger and more complicated projects that need more RAM!

As mentioned before with a graphics card and programs supporting 16 and 24bit screenmodes you can use many programs the way they were intended.

Naturally Graphics programs in particular benefit more than most from a graphics card. Now instead of having a dithered 256 colour or fringed HAM "pre-view" of the image you're working on you can work on the real thing. Another area that really benefits is web browsing on the Internet where many pages are designed for fast high colour displays. Even simple pages scroll much more smoothly and benefit from the extra resolution. One of the packages that I found benefited a lot from a graphics card was PageStream 3, not only does it support 16 and 24bit screen modes so that imported pictures look stunning but the extra resolution available allows much more of a page to be displayed readably at once.

Conclusion

I think a graphics card is the best upgrade you can get for your Amiga (once you've got the basics like a harddrive) if you use it for applications rather than games. You'll find everything you do transformed with much of your software collection getting a huge new lease of life and a whole range of professional applications becoming available to you.

It's amazing that the AmigaOS which was never designed with graphics cards in mind has been patched so seamlessly by CyberGraphX and Picasso 96 that graphics cards now really feel part of the system. Basically get one, you won't regret it!

A1200 Graphics Card Options

The A1200 is currently the most popular Amiga model (only 3 out of 27 SEALs have a different Amiga) unfortunately due to its compact desktop case it is also one of the most difficult and expensive to add a graphics card to. In this section we'll look at the various methods of adding A graphics cards to the A1200, their pros, cons and relative cost. All these options require your Amiga to be in a tower.

Zorro Bus Boards

In general Zorro Bus boards for the A1200 are not as compatible as a production Amiga Zorro system, make sure the Zorro cards you want to use will work with the busboard when you order it. That said I many people run excellent A1200 systems with Zorro bus boards. Another aspect to note is that the Zorro bus boards from Micronik and RBM both require an optional extra to give them a video slot (an extra slot in-line with a Zorro slot that gives the Zorro card access to Amiga video and audio signals). As a rule only graphics cards like the Picasso IV which have a built-in scan doubler need access to the video slot. If you need a video slot in your Zorro board the kit costs about £40 extra.

Z II Busboard and 2nd hand Z II graphics card

£110 + £70 = £180

As the Picasso IV is the only currently available Zorro graphics card in the UK it is well worth looking at the second hand market if the PIV has more features than you need. A quick visit to the Amiga sales web sites and newsgroups shows that cards like the Picasso II and GVP Spectrum are often available for about £70, nearly £200 less than a Picasso IV. For this you get a usable graphics card, supported by CyberGraphX and Picasso 96 and a Zorro bus board allowing you to add any of the huge selection of Zorro boards available (there is quite a choice of Zorro cards as long as you're prepared to buy second hand). Even though this solution will be slower than the Ateo alternative at a similar price it does offer you more flexibility over the additional cards you choose.

AteoBus and Pixel 64

£239

Ateo Concepts have designed their own expansion system for the A1200 called the Ateobus. This system uses custom expansion cards incompatible with the Amiga's Zorro standard. The bus board plugs into the A1200's fast slot (with a pass-through) and provides 4 slots for a variety of expansion cards. The first card to be available is a graphics card called the Pixel 64 with I/O, Ethernet, sound and SCSI cards planned in the near future. The Ateo bus is faster than Zorro II and very good value for money. The graphics card offers average performance. If you are satisfied with sticking to Ateo's cards for future expansion then the Ateobus is the cheapest way of adding a new graphics card to your A1200.

Zorro Bus Board and Picasso IV

£150 + £250 = £400 (including video slot for scan doubler)

The Picasso IV is widely regarded as the best Zorro graphics card, it autosenses Zorro II or III so if you're planning to upgrade to an A4000 this would be a good choice. With a ZII bus board the Picasso will not be able to give its full performance but still goes very well due to the fast graphics processor and memory. The PIV also gives you the option to add a several plug-in modules and has a built in scan doubler/flicker fixer for AGA modes so you won't need a multisync monitor. As the Zorro II busboard will allow you to add other Zorro cards if you wish this system will give you the widest possible expansion options.

Z III Bus Board, A4000 Accel. and Picasso IV

£250 + £450 + £250 = £950

Micronik make a Zorro III bus board which at first would seem to be the ideal way to add a graphics card to an A1200. Unfortunately the bus board falls down on a couple of points, firstly it is very expensive, at £250, for this price you could almost buy a second hand A4000. Then to run in Zorro III mode you need an A4000 accelerator which are both significantly more expensive than the equivalent A1200 board and are hard to find second hand. Overall I can't see a scenario where the Micronik ZIII solution could justify it's cost.

Blizzard PPC and BVision PPC

£200 to £550 + £140 = £340 to £690

one of the most attractive features of Phase5's PPC cards is the ability to add a graphics card. Along with the fast SCSI II interface fitted to some boards this makes them a complete expansion system. The BVision PPC offers the best performance of all Amiga graphics boards (along with it's sister the CVision PPC) and sells for about £100 less than the Picasso IV. If you want a complete upgrade of your A1200 to the highest level then the BlizzPPC/BVPPC combo is hard to beat. Just be aware that it doesn't allow you to add any other cards like the Ateo and Zorro bus boards do, although you can still use expansions that use other interfaces such as the clock port or even a bus board along with your PPC card! Also the BVision doesn't have a pass through or built in scan doubler.

Elbox Zorro IV Bus board with ZIV Graphics card

Guesstimate £250

As we mentioned in the News section Elbox (makers of the Power Tower) are bringing out a new busboard which will have both Zorro II slots and their own custom slots which they call Zorro IV. The first card for Zorro IV will be a graphics card and Zorro IV is said to be even faster than the Ateo bus with a 15Mb/s transfer rate. This would give Zorro III cards like the Picasso IV a run for their money assuming that a fast graphics processor and RAM are used. This bus board would seem to be a good choice as it gives you a cheap fast graphics card and the flexibility of Zorro slots and two clock ports. If our estimated price is correct this could prove to be excellent value for such a flexible expansion system.

Common Graphics Cards

Some of the more common graphics cards available both new and second hand:

Name	Maker	Slot	RAM	P/T	S/D	CGX	P96	New?	Price	Comments
CyberVision 64	Phase 5	ZIII	2-4Mb	Y	N	Y	Y	N	£100	A good fast board for Zorro III Amigas ONLY.
CyberVision 64/3D	Phase 5	ZII/III	4Mb	OPT	OPT	Y	Y	N	£100	Slightly slower than the CV64 but with 3D accl. and optional scan doubler.
CyberVision PPC	Phase 5	CS PPC	8Mb	N	N	Y	N	Y	£150	See review on pg17.
BlizzardVision PPC	Phase 5	Blizz PPC	8Mb	N	N	Y	N	Y	£140	See comments on pg 21.
Piccolo	I buro Helfrich	ZII	1-2Mb	Y	N	Y	Y	N	£50	Similar to Picasso II.
Piccolo SD64	I buro Helfrich	ZII/III	2-4Mb	Y	N	Y	Y	N	£70	Solid board, faster than Picasso II
Picasso II(+)	Village Tronic	ZII	1-2Mb	Y	N	Y	Y	N	£70	Reliable but getting old.
Picasso IV	Village Tronic	ZII/III	4Mb	N	Y	Y	Y	Y	£250	King of the Zorro boards.
Retina	MacroSystem	ZII	1-4Mb	N	N	N	N	N	£50	Slow, only really suited for 24bit picture display.
Retina BLT/Z3	MacroSystem	ZIII	4Mb	OPT	N	Y	Y	N	£90	
Spectrum 28/24	GVP(M)	ZII	2Mb	Y	N	Y	Y	Y	£120*	Only available new in USA. Similar to Picasso II except it supports Zorro III.

*Approx new price from US Amiga dealers.

your own using the filetype editor. Once you've found or created your filetype you can specify the commands you'd like available for that file. When you right click a file you get a pop-up menu of basic commands like rename and delete but with the filetype editor you can add options to this menu specific to that type of file. For example you could add an Edit option to IFF ILBM files that loads them into your favorite paint program for editing. You can also specify commands that are executed when you double click or drag and drop files. As an example of this by default DOpus comes setup to view the contents of an lha archive when you double click it and to de-crunch it when you drag and drop it into another directory.

Replacing 3rd Party Hacks

After several years of development Directory Opus Magellan II is a very stable Workbench replacement and in about two years of use I haven't found anything that won't run because of it. Because DOpus has functions like tool-bars, user definable menus, NewIcons support and is much more configurable than Workbench you'll probably find many of your current hacks and patches can be removed resulting in a more stable system.

As you would expect DOpus fully supports CyberGraphX so you can have a beautiful 16 or 24bit Workbench if you have a graphics card and also seems to run stably with hacks like MCP which some of us couldn't live without.

Opus FTP Module

It's amazing what you can do with a DOpus lister but one of the cleverest features of DOpus which has seen its second major update in Magellan II is the FTP module. FTP (File Transfer Protocol) is a popular method of moving files between computers on networks and the Internet, for example Aminet is available on FTP sites all over the world so anyone with an Internet connection and an FTP program (often called a client) can access it's massive archives of Amiga software.

The DOpus FTP module is an FTP client which instead of being a stand-alone program displays the content of the remote FTP site in an Opus lister. You can then use the normal Opus commands on the remote files even though the FTP server may be on the other side of the world. As an example when I update my website I copy the files onto the webserver using FTP. With the Opus FTP module I simply open a lister for the website directory on my harddisk and another for the FTP site and drag the files over.

For use with Aminet DOpus FTP doesn't support the useful ADT (acronym alert: Aminet Download Tool) mode that AmFTP implements which allows you to view the most recent uploads since you last visited... however DOpus FTP does show you the short description of each file as you browse Aminet which AmFTP doesn't so if you're a regular visitor like me you might want to use AmFTP to check what's new but for general Aminet browsing and FTP work I think Opus FTP now has the edge over its rival.

In Opus Magellan II the FTP module has been enhanced again (there were major improvements in the original Magellan). Some of the cool new features include:

Custom configurations for each site including custom tool bars for FTP listers.

Recursive copying and deleting so you can copy whole directory structures in one go, great for websites.

You can now use the new NEWER option of the Copy command with the FTP module to copy only files that don't exist or have a newer file date than those on the FTP site. With the new recursive operation you can update a website with one copy command!

DOpus FTP is cool and in many ways out does stand-alone FTP programs plus it has the advantage of being integrated into DOpus.

A new feature of Magellan II is themes which allow you to save an Opus configuration complete with backgrounds, colours and sound effects to a theme file. You can then recall all those settings by loading the theme file. This feature allows you to build up a library of your favorite themes and have a random one each time you load Opus. You can also download themes from the internet or CDs to use (the DOpus Plus CD has many examples, see boxout) and DOpus can convert themes intended for Windows 95 so there's a huge library all ready and waiting.

But it Can't all be Perfect

I can think of very few bad things to say about DOpus Magellan II but I think it's main problem is its sheer complexity. Although the concepts are the same all over the program (like the common Function Editor I mentioned earlier) there are still a huge number of options. GP Software are obviously aware of this as one of the changes in Magellan II is to place all the preferences in a single multi-page Environment requester instead of in two requesters which made it hard to find a particular option. However the new Environment requester now has 21 pages so it's still a lot to search through. Personally I love the way you can setup Opus to do just what you want and I think the huge number of options are inevitable to achieve this. If you've never used Opus at all before (as I hadn't when I originally got it) you'll probably find it takes some time (maybe a couple of months of regular use) to get comfortable with all the options that are available. Even then occasionally you'll find new things.

The Opus manual is extremely thorough going through how everything works, all the commands that are available, and what all the options do. However it is very much a reference rather than a tutorial manual. It's not the sort of manual you can take to bed and read (OK, I'm that sad I'm afraid). What would be great would be a set of tutorials to get new users going (see DOpus Plus CD boxout for details of a tutorial set available) otherwise there's a good chance some of Opus' power will be left unused.

Conclusion

Opus is one of those programs which make you wonder how you ever lived without it. For someone like me who

loves to customise his environment and set up everything "just so" it's great. The work you have to put in learning it is well worth it for the rewards you get... previously complex operations are a snap. So if you don't have DOpus 5 get it NOW... in a couple of months I think you'll never want to give it up.

Another question is whether the Magellan II upgrade is worth the money, to be honest as you can see from the What's New boxout the changes are mostly minor improvements, nothing that's a real "must have". For the upgrade price, which is well over half the new price, I would expect this to be a major upgrade. If all the changes to the main program and the FTP module are important to you then it's probably worth it. In my opinion GPSoftware would have done better to put the Magellan II upgrade on the DOpus Plus CD and sold it as a bundle. This would give upgraders and new users the really useful tutorials and extras along with the minor improvements in Magellan II for a reasonable price. As it is I find it really hard to call this upgrade good value for money.

Results

Pros

Configurable to the nth degree.
Expandable with commands

Cons

Intimidating for beginners.
Upgrade expensive for what you get.

Full Version:



Upgrade:



Sound Probe

Geoff Milne, head honcho of the Huddersfield Amiga User Group reviews this sampling software.



I go through phases with my software spending maybe a couple of months doing 3D rendering, same with MIDI, with such things as DTP, wordprocessing and spreadsheets etc. being fitted in and amongst. I also keep returning to sound sampling as I really do enjoy playing around with soundtracks with the intention of eventually using them for video. I normally use a multitrack tape deck to compile a soundtrack but recently, I have been giving thought to the possibility of using the Amiga but without Zorro slots, 16 bit sound sampling has not been easy. I did, last year at the WOA in London, purchase the Clarity 16 cartridge and was told at the time of some new software being written to take advantage of the Clarity. It recently arrived in the form of Soundprobe available from HiSoft in the UK for less than 30 UK pounds and I invested.

Each aspect of sampling is covered by a different settings requester making it appear exceptionally difficult to set up. I wanted to record direct to hard drive, which the manual said was possible, but I couldn't find the correct settings. It was only after two weeks that I found, by accident, a complete configuration setting for the Clarity which, when loaded, allowed instant use of the Clarity cartridge. This wasn't mentioned in the manual but I am informed by the author, Dave O'Reilly, that this is one of the

items being taken care of for the future. He also provides a website containing information and upgrades for Soundprobe which I have found very helpful.

The interface itself is similar to Stefan Kost's SFX which allows the user to open different windows on screen depending on what you wish to achieve. The main difference between Soundprobe & SFX is that Soundprobe allows you to record sounds as well as edit them which is what really sets it apart. I have used SFX for quite some time now and still haven't reached it's limits but find Soundprobe easier in use plus the fact I can record AND edit using the same software.

On the default screen, a sample window is automatically opened upon launching the program with other windows available from menu items including sampling, audio playback and effects. Almost all the tools are duplicated in menus so whichever you find easier to use is the obvious answer. The software is modular in concept which allows for the easy addition of further effects or configuration files for any other 16 bit samplers not yet covered.

Loading and saving of 8SVX, AIFF, AVR, RAW and WAV files are currently supported and the requester for saving files allows the selection of the type of file you wish to save your sample as along with an 'info' button which gives you details of that particular filetype i.e

WAV INFO: Loads/Saves RIFF-WAVE Format.

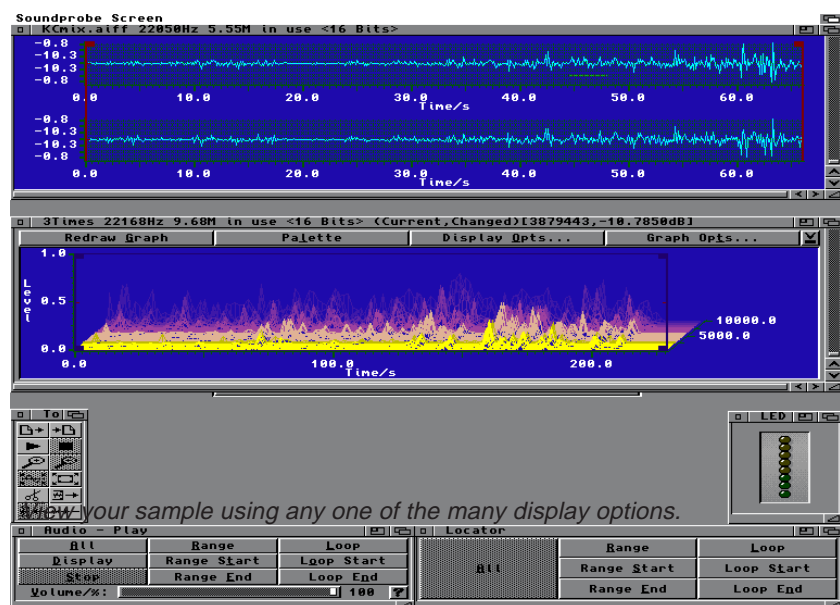
Load supports 8/16bit PCM data. Save 16bit PCM data.

Format Supports: Stereo Bits Per Sample:16

Righto! You've plugged in your sampler, set the config for it - now you have a

Product Information

Developer: David O'Reilly
Distributor: Hisoft
Tel: (0500) 223660
WWW: www.hisoft.co.uk
support: www.york.ac.uk/~djr100/sprobe.htm
Address: The Old School,
Greenfield,
Bedford, MK45 5DE
Price: Full Version: £29
V.1 Upgrade: £10



of these are very similar and it's mostly cosmetic anyway, but if you like LED's flashing to show you your recording level, or bar graphs, colour multiscope, just take your pick. Each one has an Info file for it so you can obtain more detail of the flashing lights if you wish.

Before you sample you have to set the size and rate of sample from within the Sampler window, accessed like all the others from a Menu item. It is also possible to change the sampler and monitor options from within this same window. In fact, most windows also give you access to allied settings windows and as such, are virtually complete for each area of sampling and editing.

Set the sound source playing, see the lights flash and click on record - away you go!

Then Geoff got the SoundProbe 2 Upgrade...

At first glance, the only change in SoundProbe 2 appears to be five buttons at the top of the sample window giving you the opportunity to change the Graph type, options for each of three different types of graph, a complete set of display options to change virtually EVERY setting within the sample window, completely redesign the colour palette and last but not least, a Redraw button for the waveform.

From my last time using it for intensive manipulation of video soundtracks, the speed has improved a great deal. Whilst

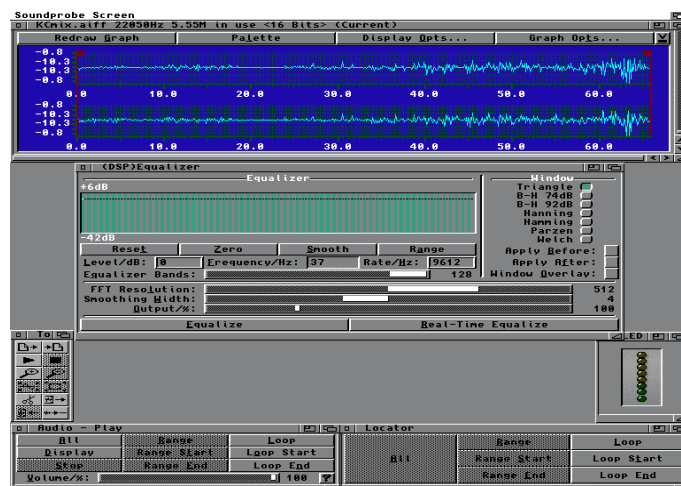
but you do require quite a bit of memory for this task.

Direct Hard Drive Editing

When you consider that with a file being edited directly from HD, the software has to find the relevant bit by skimming through it (all these files appear to be recorded sequentially), finding the exact range before actually being able to act upon it is quite some task. Soundprobell is a great improvement in this area and, for me at least, now makes it more worthwhile making a soundtrack for video on the Amiga by cutting/ pasting and 'effecting' than using my multitrack tape recorder with just the same end effect - plus I can actually SEE the length and volume of the settings which are obviously impossible on a tape deck.

Settings

The configuration of SoundProbe is something you could easily get lost in so the easiest way to start is to load a pre-configuration file from the Settings menu which covers Aura, Clarity, Megalosound. Should you require Generic parallel sampler, PCMCIA, MegamixMaster you can choose these through the Hardware Settings requester or there is an option for AHI. Save these settings once you have tried them out.



AHI

For those not familiar with AHI, it is a bit of software which sits on your machine and allows you to channel sound through whichever output you prefer be it a sound card or the internal Paula chip, using an AHI driver if one is available.

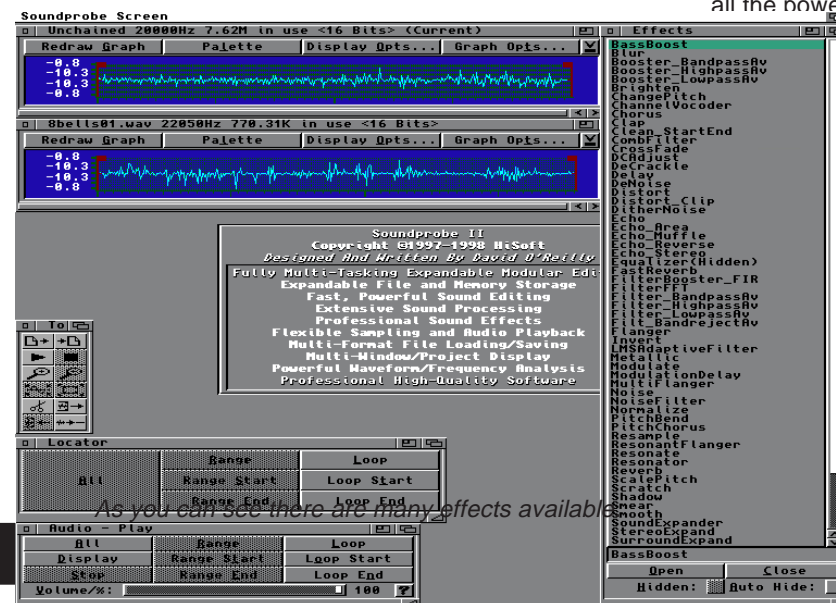
Once set, any other software which has AHI support just sends it's output to AHI and AHI sends it on to your chosen card (or chip). It is the sound equivalent to re-targettable graphics and should you change the way your sound is sent out from the Amiga i.e. change from the built in Paula chipset to a Zorro soundcard, you just change AHI prefs to point to the card and all your software output will automatically be re-routed to the card.

Most settings requesters are available from the Settings menu with a choice of seven individual requesters but each one of these requesters has a cycle button which will take you through ALL the other settings in turn. Once these are set, by loading a default setting for instance, most will not require changing for normal sampling work. Just one important setting is missing from the above requesters and that is the choice of the TYPE of recording you wish to do. Simply put, you can record direct to hard drive or into RAM and changing these settings is simplicity itself. The Audio I/O control from the Menu bar shows a list of the types available and, as loaded from the default settings, it will be set for RAM - to change this just click on, say, Clarity16_FILE and the file will be transferred from RAM to hard drive with a progress bar showing when the task is completed and that's it! You can now edit, play back AND record from and to the HD.

Also in this version is Arexx support for those of you able to take advantage - scripts will probably start appearing on Aminet shortly. I shall be keeping an eye out for these as I know as much about Arexx as I do about nuclear physics.

Shortly after I started to write this article, the postman delivered a small packet to me containing version 2.11 of Soundprobe which, as well as one or two fixes, also contains access to Arexx through a menu item and support for Surround Sound too! So it just got better again even before it had finished getting better!!! I have no idea as to how long it will be before this version hits the shops but I would check out the Sound Probe support web site if you have access to the Internet as upgrade patches have been posted here before. Just make sure you have SPII first of course.

Using Soundprobe is quite easy if you have played around with sample editing software before - all the effects are under ermmmm... an Effects menu as are Process under - guess what? Process! Simple single menu items are available for DeNoise and DeCrackle for those samples lifted from noisy sources and, should you wish to fade in/ fade out these are also single menu items which act on ranges within the sample window. For instance, if you wish to fade in at the beginning, drag the mouse over the early part of the sample window (the markings on the Waveform sample window are in seconds) which draws a box around the wave. Select Process/ Volume/ FadeIn - you get asked if you are sure and then it's done. Same for FadeOut and several other effects although quite a lot of them have further parameters which can be changed to suit your requirements - the default settings are fine in all the cases I've tried.



As you can see there are many effects available

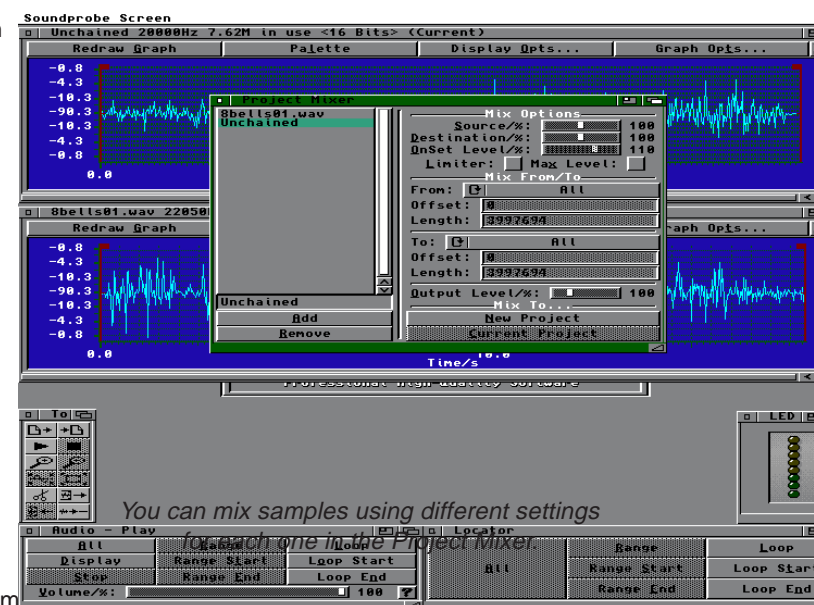
It is possible to open dozens (is there a metric equivalent of a dozen I wonder?) of sample windows which can soon cover the tool windows - so a Projects Window can be opened to handle them all!!! From within this Window you can Open/ Delete/ Load/ Save/ Remove and Hide sample windows. The sample windows themselves all have a size gadget on them

cal Zoom so re-arranging them is quite easy. I should mention that ALL the windows including the tools are floating so you can position them anywhere you like. When quitting, the positions are saved so the tools windows open in the same place next time you use SP.

Recording

With anything less than an O60, it is wise to sample at around 22050 cycles as, although SP works at 44100, it does tend to tie your machine up and this makes it impossible to click-stop with the mouse. Once recording has been completed, however, you can increase the cycle rate to higher than your recorded rates to make them compatible with other samples. Recording can be started AND stopped with a noise level setting from within the Sampler window but default is to click on Record - what else? Turning on the System button within Sampler allows your machine to multi-task but on a vanilla A1200, let the machine have it's own way - it can use all the power it can

daily
ing and
can be
D be)
e
ects
that
d to
includ-
nd
alizer,



You can mix samples using different settings for each one in the Project Mixer.

ing studio - or you could just use it for making up soundtracks for videos like wot I do. (I play as well though...)

With quite a lot of the effects it is also possible to manipulate a sound source in real-time - feed in the sound from the News, add an effect and play it back through an amp. It's probably about the only time you'll get a laugh from the News these days!

Some of the settings are so complex you do need to be an engineer to understand them at first but, playing around on a fairly fast machine or using shorter samples can quite quickly give you a good idea of the resulting effect.

But for simple fun, cutting and pasting with the odd effect can be very rewarding and as far as all the extra effects and processes are concerned, just because they are there doesn't mean you HAVE to use them - pick out the ones you enjoy the results of and use those.

In short, Soundprobell is well worth the money of either the full version or an upgrade if you already have version One - I can only criticise it for one thing - there's too much in it!!!!

Results



Olofight

Olofight, by (remarkably enough) The Real Ologram of Italy, who kindly sent us a review copy of their beat-em-up. It arrived at SEAL central all resplendant in a very nice box, containing posters, registration card, manual, a sticker, and 10 disks of blue fury (don't worry, the final release is to be on CD apparently).

I mugged Robert (he liked that) and rushed home to install this latest foray into pixelly violence. The quality of the packaging and blurb promised much....umpteen fighters, umpteen moves, special powers, umpteen modes of play, and a couple of innovative idea's.....your fighters powers grow with experience, and you can upload your high scores to the Olofight webserver to see how you fare against the other would-be alien Van-Damme's.

Installing Olofight is easy... all you need is an aga Amiga, and 10 megs of hard drive space. I have an '040/25 with PPC. BOSH!! We're away!

A slightly jerky but nice 3D intro appears which introduces your fighters, and takes up only a small part of the screen (for speed, I guess). You're then thrust into a demo mode if you don't choose to play yet. The demo mode in this is great in one respect, in that the computer opponents complete a full bout, none of this cutting away from the action just when it's getting hot rubbish.

Product Information

Developer: The Real Ologram
Distributor: Weird Science
Tel: (0116) 246 3800
WWW: www.ologram.com
www.weirdscience.co.uk
Price: £19.99
Requires: AGA Amiga, 10Mb HD

Gary Storm takes a look at this beat-em-up from new software house The Real Ologram.



great, and very well suited by the way... believe me, I heard it often enough), Olofight suffers from frames that end up in the N'th Dimension (it's jerky, ok?).

On the collision detection and variety of moves front, Ologram claim that their system has many moves, and that different area's have different damage when hit (another good idea). The moves seem ok, though not all that many, and I'm afraid to say the collision detection is as dodgy as a hermaphrodite giving you a 'special' massage. <cough>.

Unfortunately, the demo fight is a bit jerky too on my '040, but hey, let's see what the it's like to play.

I won't bother you with the storyline, which is, as usual, superfluous, and get straight into picking one of the available characters and having a fistcuffs. And it looks pretty good! The backgrounds are very detailed and colourful without taking your eye away from the action and the music is suitably typical euro-pop (give it a few minutes and you're tapping away as you fight). The moves are easy enough to achieve (all joystick with one-button type stuff), and the special moves are easier (and still nice looking)... but oh no! It plays like a geriatric in the supermarket with a trolley the size of SealZilla. OK, nothing's that bad, but as good as the graphics are, as tolerable as the music is (and the 'End Game' music is

Olofight differs slightly from the formula set down by Street Fighter, Mortal Kombat etc, in that you don't have a 'best of three fights' system. You only have the one fight to prove your worth (which I personally like). As mentioned previously, you have special moves, but are initially limited to only one each, of four types of move. It's a tad unfair, methinks, that the opponents have more amounts of special moves and more health than your fighter, to whoop your ass good. And boy is it hard! I like the idea of your fighter gaining experience,



trying. You have to be psychic to defend yourself in this game a lot of the time.

I don't believe the Amiga is a good machine for this type of game, due in part to it's joystick limitations. Softco's would be better advised to team up with a hardware developer like Power

Computing, for instance, and design a new, multiple button joystick (if possible), for use with these and any other game that wanted to take advantage of it.

leading to better health and more special moves, but I played for hours and only managed to win once. I'm not that bad at beat-em-ups... honest.

Practice makes perfect, and I'm sure I could win a few more, but the jerkiness of the animation doesn't make it an enjoyable experience to want to keep

Sorry Ologram, I really wanted to like this game, given the effort you've put into it's appearance. Unfortunately, a

beat-em-up relies first and foremost on it's smoothness and speed, then control system, variety of moves, and finally graphics. Look at 'IK+' on the C=64 or 'Way of the Exploding Fist' on the Speccy for an example of gameplay balanced with graphics. Without smooth animations, it's a chore to play. Olofight is still loads better than Rise of the Robots, and due to it's interesting new idea's, a step in the right direction, but it's just not fun to play. But hey, if you like a stiff challenge, Olofight is calling you out to meet behind the bike sheds...

Results

SMELLY



FORE-MATT Home Computing

Dept. C, PO Box 835, Wootton Bassett, Swindon, SN4 8RX
(01793) 853802

Pay by credit card and get a **free CD-ROM**.
 (call for details)
 State Amiga model when ordering.

Call or send SAE for free catalogue disk packed with details on Commercial Software, CD-ROM, Peripherals, and Shareware/Public Domain from only 50p a disk!

CD32 GAMES Akira (+ free T-Shirt).....£9.99 Alfred Chicken.....£2.99 Bubble & Squeak.....£2.99 Cannon Fodder.....£4.99 Chaos Engine.....£4.99 Clockwiser.....£2.99 Fears.....£9.99 Gloom.....£9.99 Grandslam Gamer Gld.....£9.99 Guardian.....£4.99 Gulp.....£4.99 International Karate +.....£2.99 J Barnes Euro Footy.....£2.99 Kang Fu.....£9.99 Last Ninja 3.....£2.99 Legends.....£9.99 Marvin's Divers.....£4.99 Oscar/Diggers.....£2.99 Roadkill.....£9.99 Simon the Sorcerer.....£14.99 Sleepwalker/Pinball.....£9.99 Superleague Manager.....£2.99 Total Carnage.....£4.99 Vital Light.....£2.99 Wembley Int. Soccer.....£9.99	CDROM GAMES Big Red Adventure.....£16.99 Blade.....£9.99 Civilization.....£12.99 Eat The Whistle.....£14.99 Final Odyssey.....£17.99 Foundation.....£27.99 Genetic Species.....£27.99 Myst.....£29.99 OnEscapee.....£27.99 Quake.....£29.99 Quake Mission Pack 1.....£9.99 Quake Mission Pack 2.....£9.99 Shadow of 3rd Moon.....£19.99 Sixth Sense Invest'ns.....£19.99 Street Racer CD.....£12.99 Theme Park CD.....£12.99 The Settlers II.....£17.99 The Strangers AGA.....£17.99 Ultimate Gloom.....£12.99 Ult. Super Skidmarks.....£12.99 Uropa 2.....£17.99 Virtual Karting 2.....£12.99 Now Games.....£4.99 Octamed Soundstudio.....£9.99 Oh Yes More Worms.....£9.99 PFS2.....£29.99 Scene Storm.....£4.99 Screen Savers.....£9.99 S/W Explosion 1 or 2.....£4.99 S/W Terrors 1.....£14.99 System Booster.....£9.99 The Colour Library.....£14.99 The Learning Curve.....£19.99 The Office (gold cd).....£9.99 Time of Reckoning.....£9.99 UPD Gold.....£14.99 Utilities Experience.....£9.99 Winbench 98.....£9.99 Wordworth 7.....£39.99 Zoom 2.....£19.99	CDROM Clip Art CD.....£9.99 Deluxe Paint 5.....£17.99 Emulators Unlimited.....£19.99 Encounters UFO.....£14.99 Epic Encyclopedia.....£4.99 Epic Encyclopedia 98.....£19.99 EuroCD vol 1.....£11.99 Fantastic Dreams.....£59.99 Fonts CD.....£9.99 Gateway vol 1.....£7.99 Guinness Records v2.....£14.99 Illusions in 3D.....£9.99 Insight Dinosaurs.....£9.99 In-To-The-Net.....£14.99 LSD 1 or 2 ea.....£14.99 Meeting Pearls vol 1.....£9.99 Multimedia Backdrop.....£19.99 Multimedia Toolkit.....£9.99 Network CD.....£9.99 Network CD 2.....£14.99 Nothing But Tetris.....£9.99 Pinball Mania.....£7.99 Player Mgr 2 Extra.....£9.99 Rise of the Robots aga.....£7.99 Oh Yes More Worms.....£9.99 PFS2.....£29.99 Scene Storm.....£4.99 Screen Savers.....£9.99 S/W Explosion 1 or 2.....£4.99 S/W Terrors 1.....£14.99 System Booster.....£9.99 The Colour Library.....£14.99 The Learning Curve.....£19.99 The Office (gold cd).....£9.99 Time of Reckoning.....£9.99 UPD Gold.....£14.99 Utilities Experience.....£9.99 Winbench 98.....£9.99 Wordworth 7.....£39.99 Zoom 2.....£19.99	MUSIC CD / VIDEO A500 Made Easy VHS.....£4.99 Amiga Theme CD.....£4.99 DISK AGA A1200 ONLY Acid Attack.....£12.99 Banshee.....£4.99 Bograts.....£12.99 Breathless.....£14.99 Burnout.....£14.99 Capital Punishment.....£14.99 Eat The Whistle.....£14.99 Fears.....£7.99 Gloom Deluxe.....£9.99 Guardian.....£4.99 Gunbee F-99 (4mb).....£7.99 Heimdall 2.....£4.99 Legends.....£7.99 Manyk Mayhem.....£14.99 Marvin's Adventure.....£4.99 OloFight (HD/4mb).....£19.99 Pinball Illusions.....£7.99 Pinball Mania.....£7.99 Player Mgr 2 Extra.....£9.99 Rise of the Robots aga.....£7.99 Roadkill.....£4.99 Simon the Sorcerer aga.....£14.99 Sixth Sense Invest'ns.....£19.99 Slamtilt.....£14.99 Strip Pot (18).....£4.99 Superleague Mgr aga.....£9.99 Testament.....£14.99 Theme Park aga.....£12.99 The Sperm Legacy.....£14.99 Thomas Tank Pinball.....£7.99 Total Carnage.....£4.99 Tracksuit Mgr2 98 aga.....£14.99 Virtual Karting 2.....£12.99 Worms Directors Cut.....£12.99 Xtreme Racing.....£9.99	DISK GAMES A320 Airbus v2.....£14.99 Amazon Queen.....£19.99 Arcade Action.....£12.99 A-Train.....£9.99 B17 Flying Fortress.....£14.99 Badlands Pete.....£4.99 Base Jumpers.....£4.99 Blade.....£9.99 Blitz Tennis.....£9.99 Blockhead 2 (1.5mb).....£7.99 Body Blows Galactic.....£19.99 Bravo Romeo Delta.....£4.99 Bubble & Squeak.....£14.99 Bumper Quad Pack.....£9.99 Cannon Fodder 1 or 2.....£8.99 Championshup Chall.....£14.99 Chaos Engine 2.....£14.99 Civilization.....£12.99 Classic Arcadia.....£4.99 Club & Country.....£4.99 Club Football Mgr.....£9.99 Colonization.....£12.99 Cosmic Spacehead.....£4.99 Daily Dbl Horsereading.....£7.99 Dalek Attack.....£4.99 Damage (18).....£9.99 Death Mask.....£4.99 Desert Strike.....£8.99 Dune II.....£12.99 Enemy.....£14.99 Euro Superleague.....£7.99 F19 Stealth.....£9.99 F117A Nighthawk.....£9.99 Fantastic Dizzy.....£4.99 Fast Food Dizzy.....£4.99 Fields of Glory.....£14.99 Forest Dumb Forever.....£7.99 Gooch Test Match.....£4.99 Gooch World Cricket.....£8.99 Gunship 2000.....£12.99	DISK GAMES Hillsea Lido.....£12.99 Impossible Mission.....£8.99 International Golf.....£4.99 Valhalla 1, 2 or 3 ea.....£14.99 Kids Rule OK 2.....£8.99 Lemmings.....£8.99 Wembley Rugby Leag'.....£4.99 Wing Commander.....£9.99 Witz 'n' Liz.....£4.99 Operation Combat 2.....£9.99 Overlord.....£14.99 PGA Tour Golf.....£9.99 PGA Tour Golf Plus.....£12.99 XP-8.....£4.99 Pinball Dreams.....£7.99 Pinball Obsession.....£7.99 Police Quest.....£9.99 Power Drive.....£12.99 Railroad Tycoon.....£12.99 Rise of the Robots ecs.....£7.99 Road Rash.....£8.99 Robocod James Pond2.....£4.99 Rugby League Coach.....£4.99 Sensible Golf.....£9.99 Silent Service 2.....£19.99 Simon the Sorcerer.....£14.99 Skidmarks.....£7.99 Soccer Team Manager.....£4.99 Snapperazzi.....£4.99 Speedball.....£4.99 Sporting Spectacular.....£14.99 Street Fighter 2.....£14.99 Superleague Manager.....£9.99 Super Tennis Champs.....£9.99 Sword.....£14.99 Inter Base 2.....£4.99 Tennis Cup 2.....£4.99 Theme Park.....£12.99 Thomas Tank Colln.....£4.99 Thunder Blade.....£4.99 Thunderhawk AH-73M.....£4.99 Timekeepers.....£12.99 Timekeepers Exp. Dsk.....£5.99 Tiny Troops.....£16.99	DISK GAMES Touring Car Challenge.....£9.99 Tracksuit Mgr. 2 '98.....£14.99 Valhalla 1, 2 or 3 ea.....£14.99 War Zone oem.....£2.99 Wembley Rugby Leag'.....£4.99 Wing Commander.....£9.99 Witz 'n' Liz.....£4.99 World Golf.....£9.99 Worlds at War.....£7.99 Xenon 2.....£4.99 XP-8.....£4.99 Yoik Folk Dizzy.....£4.99 Zeewolf 1 or 2.....£4.99	LIMITED CLASSICS (Telephone orders only!) Alien Breed 2 oem.....£12.99 Apidya.....£14.99 Back to the Future 3.....£9.99 Battle Command.....£7.99 CarVup.....£7.99 Crack Down.....£14.99 Cybercon.....£9.99 Dungeon Quest.....£7.99 Fantastic Voyage.....£9.99 Indy: Last Crusade.....£7.99 Jim Power Mut Planet.....£7.99 Joe/Mac Cave Ninja.....£14.99 Lords of Chaos.....£4.99 Lotus 3.....£7.99 Matrix Marauders.....£7.99 Out Run Europa.....£17.99 Pegasus.....£17.99 Populous 2 Challenge.....£7.99 Projectyle.....£9.99 Quadralien.....£6.99 Savage.....£7.99	LIMITED EDUCATION Fun School 4 (under 5).....£12.99 Junior Typist.....£9.99	LIMITED UTILITIES Design Works.....£19.99 DeluxeMusicConstSet.....£24.99 Font Enhancer (call).....£14.99 Hisoft Extend.....£14.99 Image Link.....£19.99 Media Show.....£19.99 Pro Write 2.5.....£14.99 Showmaker.....£14.99 Transwrite.....£14.99 TV Text Pro v2.....£19.99
---	---	--	--	---	---	---	---	--	--

CD STARTER PACK
 £15.00 + £2 p&p (UK)
 Pack includes Global Amiga Experience, Marvin's Marvelous Adventure, Demos are Forever, Insight Dinosaurs & Pandora's CD

3.5" DRIVE CLEANING KIT £1.99
JOYPAD £9.99, JOYSTICK £7.99, MOUSE/MAT £9.99
BLANK DISKS: Grade 'A' 30p each, Ex S/W House 20p each
 P&P per item: UK = £1, EU = £2.50, R.O.W = £5 first then £2 each

RACING BUNDLE
 £20.00 + £1 p&p (UK)
 Street Racer AGA & Skidmarks
 Save £4 on normal price of £23 + £2 p&p

Workbench Cookbook

Gary Storm cooks up a cool looking Workbench using only 16 colours.

For the final effect take a look at the back cover...

Unless you have a graphics card, it can be difficult to get a good looking Wb. If you go 32 colours to make all your icons and backgrounds look great, your miggy slows to a geriatric pace, and eats up all your chip ram.

We're going to give you a recipe, and help you cook up a 16 colour Wb, and make it look nearly as good as 32, keeping the speed and chip ram intact. I'll also tell you of a few essential utilities to let your Wb kick ass even more.

To mix it all together you'll need an Amiga, a hard drive, and some time:)

Right, for those of you without (or even with, if you want) multi-sync monitors, first of all you're going to need to install 'Magic TV2', which will give you a high-res-interlace screen with barely any flicker, but limits you to 16 colours, which is what we want anyway. All you need to do is grab this brilliant little utility, put it into C:, and it add to your 's:startup-sequence' before 'SetPatch'. So the beginning of your startup-sequence looks like this:

```
; $VER: startup-sequence 39.9
(9.8.92)
```

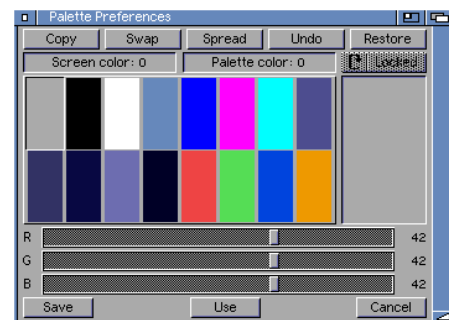
```
C:SetPatch QUIET
```

```
MagicTV
```

```
C:Version >NIL:
```

```
Simple, eh?
```

Next, grab a copy of 'Full Palette', which will lock the 16 colours of your



The Full Palette preferences editor allows you to lock each colour in your palette.

Workbench into the best selection.

Whack the FPPrefs program into your C:directory too then add the following to your s:startup-sequence just after the C:IPrefs line:

```
Run >NIL: FPPrefs
```

Then copy the FullPalette program into your Prefs drawer and use it to set up the colours. I used the palette suggested by the author of MagicTV. Set the Full Palette colours manually to the values in the Palette boxout, and don't forget to make sure they're all 'locked'.

Next you'll need to install the NewIcons patch. Go through the installation process, but say 'no' to 'do you want to install New-Icon icons?'. Or you could say yes if you want to save yourself some work, but have a Sesame Street Workbench.

Now that you've done that, you'll need a decent set of icons and backgrounds to jazz up your Wb. I used to prefer 'Magic Wb' icons as I think the 'NewIcon' icons look kiddy. Fortunately other people also thought the same thing, and drew their own icon sets using the 'NewIcon' patch (which let's you use 32 colour icons, instead of the default 8 colour icons). My favourite icon sets are 'GlowIcons' which are gorgeous and glow when you select them (the artist, Matt Chaput, works for Silicon Graphics, and is doing the icons for OS3.5) and 'Archeologicons' which are realistic things from archeology (funny that) from all over the world. I've also used a tree frog as my RAM icon, from 'TreeFrogIcons', believe it or not.

There are plenty of NewIcon icon sets on Aminet, CU Amiga and Amiga Format CD's, so take a look and choose your weapons. Whichever NewIcons you go for, they'll map themselves to the closest colours in your palette, and look nearly as good as if you had a 32 colour Wb. Just install 'Icon Installer' (I installed it into 'Tools') and use that to decorate your screen.

Palette

Here are the colour values you need to set in the FullPalette preferences editor, the 4-bit values are for older OCS and ECS chipset Amigas (A500s, A2000s etc.) and the 8-bit values are for AGA Amigas (e.g. A1200s and A4000s)

No.	Name	4-bit			8-bit		
		R	G	B	R	G	B
0	Grey 4	9	9	9	153	153	153
1	Black	0	0	0	0	0	0
2	White	15	15	15	255	255	255
3	Blue	3	6	10	51	102	170
4	Grey 3	8	8	8	136	136	136
5	Grey 6	12	12	12	204	204	204
6	Light Brown	12	9	6	204	153	102
7	Yellow	13	11	3	221	187	51
8	Purple	9	4	10	153	68	170
9	Red	13	2	2	221	34	34
10	Grey 1	2	2	2	34	34	34
11	Dark Blue	0	5	9	0	85	153
12	Grey 2	5	5	5	85	85	85
13	Grey 5	10	10	10	170	170	170
14	Green	2	8	2	34	136	34
15	Light Blue	5	10	11	85	170	187

Right, that's the screenmode, palette and icons taken care of - but your background still looks cack, eh?

Here's where a handy little dabbling in P-Paint does the trick (thanks to master-chef Robert for the recipe!). This is the part which is kind of like basting the turkey and stuffing it into the oven.

Your Wb is limited to 16 colours, which everything must share. That's why we've locked them, so nothing pinches colours just for itself, and leaves the crappiest ones for the little sibling too small to get the better ones:). This is why we need to convert any background patterns or pictures you'd want to use, to the same palette that your Wb now uses. Ready?

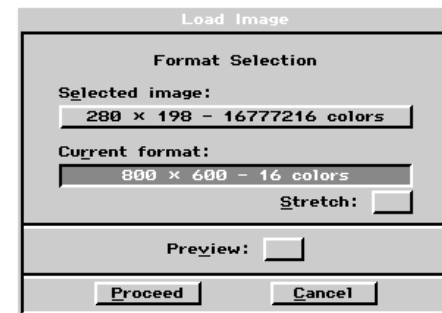
1, Load up PPaint (it helps:)).

2, Go to the 'Image Format...' item in the 'Projects' menu and change the colours to 16.

3, In the 'Settings' menu you'll see 'Dithering'.....tick 'Floyd-Steinberg' and

'Best Quality'. Now you're ready to start magicking!

4, 'Load' in your selected 16 million colour Wb pattern, and select the 16 colour 'Current format' when the Load image requester appears:



PPaint will now convert that pattern to 16 colours, and it doesn't look too bad eh? But don't even think about saving that one, because PPaint has done the clever thing and mapped down the pattern to the best 16 colours it could salvage from the original palette. Now you have to convert that 16 colour pattern to your palette, and this is where PPaint is very quick and handy.

5, In the 'Palette' sub-menu of the 'Colour' menu, select 'From Screen...'. A window will appear with all the screens you have open, so you can select to use one of the palettes. Select 'Workbench Screen'.

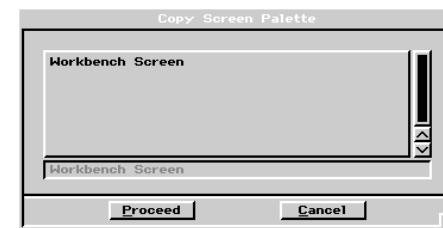
Ingredients

Here are all the programs you'll need for this recipe of Workbench perfection:

Program	Author	Aminet Dir.	CD
Magic TV2	Neil Crawforth	util/wb	23
Full Palette	Massimo Tantignone	util/wb	23
Icon Installer	Tom Ekstrom	util/wb	9
NewIcons	Eric Sauvageau	util/wb	22
wcp (Glow Icons)	Matt Chaput	pix/nicon	27
Archeologicons	Lyle Zapato	pix/nicon	
TreeFrogIcons	Lyle Zapato	pix/nicon	
PPaint	Colanto - www.colanto.com	or your favourite Amiga dealer.	
Eye Poppers	Giles C. Hendrix	pix/back	24 & 27

Additional ingredients - add for flavour:

MCP	Michael Knoke	util/cdity	22
ARQ	Martin J. Laubach	util/cdity	14
KCON	David Larsson	util/shell	4
PicBoot	Magnus Holmgren	util/boot	9
DOPus Magellan II	GP Software - www.gpsoft.com.au		
TB Clock	Unknown	util/time	14
SwazInfo	David Swasbrook	util/wb	16
Magic Menu	Olaf Barthel	util/wb	
Tools Daemon	Nico Francois	util/boot	
Birdie	Trond Werner Hansen	http://www.vgr.com/birdie	



6, Now, also in the 'Colour' menu, select 'render', and bosh!! instant (nearly) 16 colour pattern with your palette.

7, If it looks ok (if a bit grainy - but remember it won't look so grainy when used on your Wb, as it will be much smaller) then select the cutting tool '[]', press 'F9' followed by 'F10' to get rid of the toolbars, and drag the mouse from the top left to the bottom right, making sure you cut one pixel in from the edge, and cut!

8, Then bring back the toolbars (F9 and F10 again) and save your brush. Renaming it to 'whatever_16.bsh' makes it easier to keep track of later.

I did the above with all of the eyepoppers patterns (originally 256 colour patterns), and about 70% were good enough to keep as 16 colour patterns. You can grab them off me if you want. I also converted some 256 colour full-screen 3d pictures, which came out pretty well. I'd suggest that you make dedicated 16-colour patterns drawer, probably in your 'Prefs' directory.

To add a random bootpicture which fades in and out every time you boot up, whack 'Picboot' into c: and add some commands (depending on where your boot picture directory is, and whatever preferences you have) to your 'startup-sequence', here's the section of my mine, for reference:

```
C:picboot
System:WBgfx/BootPics/#?
DETACH CENTER YES DEFAULT YES
FI 2 FO 2 DELAY 500 PATCH
```

And there you go, a tasty 16 colour Workbench! Not a replacement for a graphics card, that's for sure, but it's the best looking Wb you can get without one (keeping chip RAM and speed intact).

Side Salad?

Now your Workbench is looking gorgeous here are some add-ons that will make it easier to use too:

MCP

to do alot of little hacky things. I leave most of it turned off (especially any memory stuff), but what I do leave on makes things look better.

ARQ

Cool animated requesters which respond to Enter for OK and Esc for Cancel.

KingCON

Makes Shell stuff much easier.

Visage

The best picture viewer we've found so far.

TBClock

Whacks a digital clock in the right of your menu bar.

SwazInfo

Gives you a better Icon information requester.

MagicMenu

Gives your menu's a great 3d look (and other things).

ToolsDaemon

Lets you make your own menus very easily.

Birdie

Gives your window borders some patterns.

PD Paradise

Martin Miller and Robert Williams delve into their disk boxes to deliver some more Public Domain delicacies.

PowerPacker 5

by Nico Francois

Underground PD - £1.50

Have you got a small Hard Drive, need a bigger one but cannot afford it, or would you just like to make better use of the disk space that you have? Why not think about File Compression.

PowerPacker is an excellent and flexible utility which compresses executable and data files. Decompression is very fast and the additional loading time is not usually noticeable, except on very large files and even then it only takes 1 or 2 seconds longer.

The program makes use of the PowerPacker.Library and Explode.Library, compression rates are very good and offer a choice of 5 modes

which will suit most uses. There is also a script facility which allows you to set up a long list of files to be crunched, so that you can go away and leave them to be processed. I have used EPU and Disk Stakker which compress/decompress all files in a partition in the background, but personally I found them to be a bit buggy, causing random system hang-ups. On the other hand, PowerPacker seems very stable and has been around for a long time.

A number of utilities compliment the use of PowerPacked files. PPMore is for crunched text files, PPSHOW for pictures, PPGuide for AmigaGuides, PPTYPE for printing and PPDC which is a CLI file decruncher. These can be set as icon default tools or default tools in a File Manager program. There is also PP, the PowerPacker Patcher, a background program, which can be run from your User-Startup. It patches the system to

treat PowerPacked files as if they were normal files and decompresses them before passing them to the destination program such as a Word Processor or Art Program.

There is also a built in feature that can warn you if your Startup files are altered giving you a very basic guard against viruses that try to alter them. Obviously, a program such as this requires a little bit of ground work by the user, but I think it is well worth the effort. I recently PowerPacked a batch of mixed programs and data files and reduced the disk space needed from 3,002,366 bytes to only 1,569,376 bytes - a gain of 48%.

I have made so much use of PowerPacker since buying my Hard Drive that I could not live without it!

Martin

Award Maker

By Cameron J. Shaffer

Underground PD - 4 Disks

This four disk package can produce a vast range of very good quality Awards and Certificates in both colour and black/white. Printing results are very good even on my very basic Epson LX800.

The selection of awards cover an extensive range of subjects from Sport and Education to Personal and Humorous. Many have preset text and pictures with a choice of fonts and borders, but some layouts allow you to add your own text as well. Just add the date and recipients name and away you go.

Award Maker is an unusual package and it would be hard not to think of a use for it. Apart from serious use, I found it fun

to print some of the more comical awards just to give to friends for a laugh.

Although there is no Hard Drive Installer supplied, manual installation was easy enough and the program runs equally well from floppy or HD.

Martin

CyberShow 9.1a

By Helmut Hoffmann

Aminet: gfx/board, Disc 28

Shareware, £25 in a package with PhotoAlbum

CyberShow is a multi-format image viewer particularly aimed at Amiga users with graphics cards although it does work under AGA. After you de-archive

the package installation is simple. Just drag the CyberShow drawer to the location of your choice on your hard disk, no assigns are needed.

Once it is in place CyberShow can be run from it's icon or from a shell prompt. Either way there are loads of options controlled by tooltypes or shell arguments respectively. If you start CS without changing any settings the program pops up a file requester so you can choose which pictures you want to

view. In the requester you can choose a single file, a group of files (by Shift-clicking) or a whole directory to view. If you choose a directory CyberShow can be set to show all the pictures in sub-directories too. Once you've picked your files the default behaviour is to show them in turn in a window on the Workbench Screen, this is obviously limited to the number of colours and resolution of your Workbench. By changing some options you can tell CyberShow to open windows on its own screen or

show the images without a window on a black screen. For a bit of added interest you can also add a random transition between each image.

When you choose to have CyberShow open on its own screen you can set the screenmode it will use in various ways. Using the BESTMODE option the program will pick the screenmode available on your Amiga that best suits the image to be displayed. Using the SCREENMODE option you can specify a particular screenmode to use. Finally you can use the HEIGHT, WIDTH and DEPTH options to specify the size and number of colours (bit DEPTH e.g. 8bit or 24bit) then CyberShow will choose the screenmode closest to your requirements. If you have a monitor like mine that takes time to re-sync between screenmode changes locking CS to use one screenmode is very useful.

Like most other viewers CyberShow can be controlled simply while you're viewing pictures, pressing Space moves to the next image and Esc quits the program. For a total hands free experience you can use the delay function to pause on each picture for a definable number of seconds then continue. In both modes while you view one picture CS is pre-loading the next one so once you've finished the next picture is usually ready instantly. CyberShow also has menu options (with hotkey equivalents) which you can use whilst viewing. Particularly useful amongst these are Previous Picture which allows you to go backward

as well as forward through your selection of images, Picture Information which opens a requester with the filename, size and format of the selected image so you can find it again later and Delete which (you've guessed it) actually deletes the image from disk. You can also toggle some of the options set on start-up using the menus but to make these settings permanent you have to edit the tooltypes or change the shell arguments you use.

If the picture you want to view is bigger than the screenmode you selected CyberShow allows you to pan around using the cursor keys (it does not open a big auto-scroll screen). You can also use the + and - keys or menu options to zoom in and out from the image. You can also set a menu option to zoom each picture to fit the screen automatically. A limitation of the zoom function is that it only scales to whole ratios e.g.: 1:2, 1:4 etc. This means that an image that is only just too big has to be halved in size to fit on the screen leaving a wide black border.

CyberShow works brilliantly on graphics cards and allows you to make full use of the 16 and 24bit screenmodes. Under AGA CyberShow is limited to 256 colour 8bit screens the quality of which is low compared to viewers like Visage which use HAM8.

Most other viewers are freeware so CyberShow should be good to justify it's price, fortunately it is, so long as you

Image Formats

One of the most important aspects of any image viewer or catalogue is what formats it supports, here's the list for both CyberShow and PhotoAlbum

- IFF-ILBM (1-8bit, 24bit etc.)
- PhotoCD
- Jpeg (incl. progressive)
- PPM/PGM/PBM
- QRT
- Targa
- PCX
- BMP
- TIF
- DEEP
- YUV
- VLAB
- RGB
- HHsYUVSg
- IFF-PBM
- ACBM
- FBM
- Sun raster
- MacPaint
- HHsXRL
- binary-EPS
- TBCPlus frames & fields
- Datatypes (including 24bit)

have a graphics card. CyberShow is the best viewer I have come across, it has far more options than any of the others and is also very fast and smooth in use.

Robert

PhotoAlbum 6.0

By Helmut Hoffmann

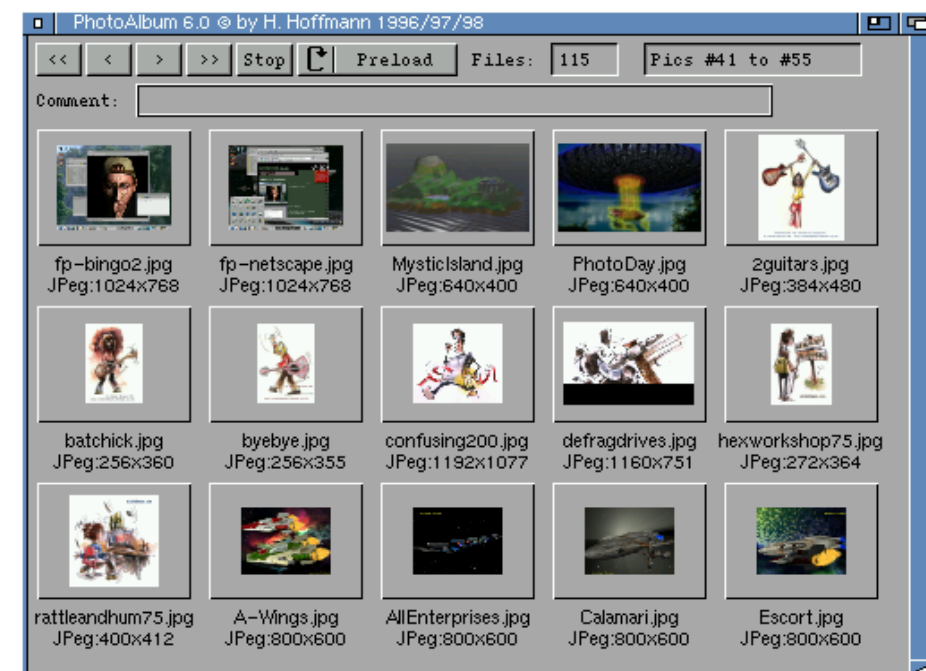
Aminet: gfx/misc, Disc 29

Shareware, £25 in a package with CyberShow

PhotoAlbum is a multi-format picture catalogue by the author CyberShow and unsurprisingly it shares many features with CyberShow.

Again installation is simple, just drag the drawer where you want it. When you run the program it opens its main window where the catalogue will be displayed and a file requester. In the requester you can pick the files or directory you want to catalogue (PhotoAlbum can scan sub

Continued Over...



A typical PhotoAlbum catalogue.

...PhotoAlbum 6.0 Review Continued directories too if you wish). If you select a directory the program scans all the files in each directory then goes through them one by one, and for each one that is a picture in a format it recognises it creates a thumbnail image in the main window. The best aspect of PhotoAlbum is the speed at which it creates thumbnails and that you can use the program whilst it creates them. So if you set it going creating a catalogue of a CD-ROM you can use the buttons at the top of the window to browse through the pages it has already created while more pages are being generated. If you prefer you can switch PA into 'No Preload' mode using a cycle gadget and it will only generate one page of thumbnails at a time.

The Photo Album window is resizable and there are several options for the size of thumbnail it can generate. You can choose what information to display below each thumbnail. When I am developing web pages I have the filename and image size displayed so I can choose the image I want from the catalogue and copy the name and size straight into my HTML code. If you want to get a closer look at an image in the catalogue double clicking its thumbnail

opens a viewer window which shows the image at full size.

Much of the time PhotoAlbum is so fast there is no need to save the catalogue, you can just generate the latest up-to-date one on the fly. However if you want to save PA gives you two options: Save the thumbnail images along with the pictures in the same directory so PA doesn't have to generate them next time. Or save the catalogue in one file and browse it even if the volume containing the images isn't available.

Within the catalogue you can select a thumbnail to work on by single clicking on it, you can Shift-click to select several. Once you have some selected the menu options can be used to work on the thumbnails. For example you can delete a thumbnail from the catalogue or the actual image from disk, load the image into several image processors (including Photogenics and ImageFX) or get further information on the image. One very useful option is to pass the filename to a user definable AREXX command, this means you could set-up your own picture viewer or automatically process the image. One improvement that could be made would be to allow several such user AREXX commands as just one is a bit limiting.

and 28% are still using a 68020 processor, and that the most popular uses for the Amiga were word processing, games and art. Bearing these survey results in mind, one must surely ask the question: "Exactly who is deciding the price and features of the new Amiga and on what basis?"

The Amiga community would appear to be split between those on a limited budget, who are trying hard to upgrade and hold on to their beloved Amiga and those who have money to spend and want the biggest, fastest and best machine. If the way forward is going to be a vast advance in technology and price are we going to lose the support of the "lower end" Amiga users? We need all the support we can get if the Amiga is to survive.

In these days of Surface Mount Technology and micro components surely there could be many more affordable upgrades for basic A1200s. There must be an awful lot of them around, living in the past, not even aware of the upgrades available. Now we only have Amiga Format available through newsagents, and many do not keep it on the shelf, there may well be many owners of basic A1200s who don't even know that you can still buy an Amiga dedicated magazine and therefore have no voice in it's future.

We should search out these people and make them aware of the upgrades and soft-

PhotoAlbum performs better under AGA than CyberShow. On a 256 colour screen the thumbnails are generally of good quality although they tend to degrade the further through the catalogue you go as all the available colours are used up by previous thumbnails. The only real problem is when you view an image, as the viewer window opens on the PhotoAlbum screen where all the colours are used by thumbnails the quality is usually poor. On a 16 or 24bit graphics card screen PA shows thumbnails and views pictures in all their glory.

Although it might not have quite as many options as the commercial alternatives like Picture Manager Pro the sheer speed of Photo Album makes it a much more useful tool in my opinion. I use it all the time for browsing Clipart CDs and Image CDs and for DTP and HTML work without cluttering up my hard drive with catalogue files.

Conclusion

The CyberShow/PhotoAlbum bundle is quite expensive for Shareware however the quality of the programs is more than worth it. If you've got a graphics card I'd say this is an essential purchase.

Robert

ware available and where they can be obtained. Let them know that the Amiga is NOT DEAD. Perhaps SEAL could compile and print a directory of anywhere selling Amiga hardware or software.

Martin Miller

I agree with just about everything you have said here Martin, All Amiga users are vitally important for the future of the platform, whatever their spending power. There are some low cost upgrades available for the A1200 (such as Power Computing's new Typhoon boards, 030, 8Mb and SCSI for £90) so companies can produce them if there's a demand. However if all the low end users abandon the platform there will be no such demand. Here at SEAL we want to root out every single Amiga user in South Essex and show them just what the Amiga can do and what is available to make their machine fly. However it is difficult to find people so any suggestions are very welcome.

From Clubbed's point of view we aim to please all types of Amiga users, we've mainly leant towards the high-end so far because our main contributors have that type of system. We welcome contributions from anyone so get writing for issue 3!

SEAL Membership Benefits

SEAL members benefit from many services:

Help and Advice

SEAL members are always giving each other help and advice on all aspects of Amiga hardware and software, when you join you'll get a listing of all the members with their phone numbers so there's always someone to turn to in your hour of need.

Hardware Fitting and Software Installation

Within SEAL there are many years of Amiga experience, including the fitting and configuration of countless pieces of hardware and the installation and use of numerous software packages. So if you need a helping hand there's almost bound to be someone with experience willing to help. In particular we've become expert at installing hard drives, CD-ROMs and other common upgrades.

Scanning and Printing

Several SEAL members have scanners and many have colour printers, if at any time you need some pictures scanned or documents printed someone is always available to help.

CD-R Hard Drive Backup

3 SEAL members have clubbed (groan!) together to buy a CD writer and they offer a hard disk backup service to other members at a £5 fee plus the cost of the CD-R (about £1). Simply contact Mick, Robert or Gary to arrange a backup session.

Discounts

As mentioned in the SEAL Update section we now have arrangements with Underground PD and Forematt Home Computing to give SEAL members a discount on their products. Underground PD will give you a 10% discount on anything you order and Forematt will give a variable discount depending on your order. We hope to announce more discount deals soon.

Note that with all these services you will have to pay for any costs incurred (for example paper for printing, disks etc.).

Joining

If you would like to join SEAL the membership fee is £30 per year (payable as £2.50/month if you prefer), this covers bi-weekly meetings including refreshments and 4 copies of Clubbed per year. For further details please contact us at:

Telephone Mick Sutton on (01268) 761429 (7 to 9pm)
Write To Mick Sutton
20 Roding Way
Wickford
Essex
SS12 9BB
Visit <http://seal.amiga.tn>
EMail seal@thunder.u-net.com



You can cycle screens by pressing L-Amiga+M and jump straight back to the Workbench screen by pressing L-Amiga+N

Download Service

If you're not on the Internet Clubbed can help you get the freely distributable programs and upgrades mentioned in this issue.

Simply send us one floppy disk per item along with a stamped addressed padded envelope. On each disk write the name of the software along with your name and address. Send the package to the following address:

Clubbed,
26 Wincoat,
Benfleet,
Essex, SS7 5AH,
ENGLAND.

We will then copy the files onto your disks and post them back to you. SEAL members can get a copy of any program or upgrade at a SEAL meeting, please phone Robert Williams in advance and let him know what you want before the meeting.

NOTE: this service applies to freely distributable software only, **NO PIRACY!**

Help Line

Several SEAL members have very kindly volunteered to help other members and readers of Clubbed in their areas of expertise.

General Amiga, Shell, AREXX, Directory Opus 5, DTP (PageStream)
Robert Williams
(01268) 569937 after 6pm
robert@williams.demon.co.uk

3D Graphics (Lightwave, Imagine), Image Processing (Photogenics, Art Effect)
Spencer Jarvis
(01375) 644614

General Amiga, SEAL Information
Mick Sutton
(01268) 761429
sicky@btinternet.com

Contact us if you'd be willing to use your skills to help other Amiga users and we'll add you to this list.

Next Issue

In the next issue of Clubbed our theme is going to be getting on the Internet so we'll have a feature on how to get on-line, the different service providers, the hardware you need and most importantly what to do and where to go once you get on-line. To supplement this feature there will be reviews of the most popular Amiga Internet Software including:

- Netconnect 2
- Miami
- IBrowse
- Thor
- YAM

We'll also have our usual mix of news, reviews, features and support items including:

- Pace Solo Modem and STFax Review
- BVision PPC Review
- Turbo Print 7 Review
- Cinema 4D Tutorial

Issue 3 is due to be published in mid May, we hope to have the issue ready before the World of Amiga Show. Then we'll post issues to subscribers after the show with an additional show report.

Letter

Dear Clubbed,

Firstly, my I congratulate everyone involved in the production of CLUBBED Issue 1, certainly a landmark in SEAL's history. I have enjoyed reading it very much. I would like to offer a few comments from the owner of a fairly basic desktop A1200. Just recently I managed to upgrade my A1200 with a 68030 accelerator board, Surf Squirrel, and CD-ROM, but only because I recently joined SEAL and was fortunate enough to obtain some second-hand upgrades at very fair prices.

The Amiga 1200 appealed to me because it was compact, versatile, affordable, it didn't need a tower, the OS knocked the PC into a cocked hat, plus it could use a domestic television, although a monitor is better on the eyes for detailed text and graphics work.

In the survey results in CU Amiga May 1998 issue it was interesting to note that a significant number of people were hoping for a new Amiga in the £300 price range as well as those prepared to spend £1000. In the survey results in Amiga Format September 1998

issue, it was found that 45% use a 68030

Gallery



Checkmate

By Roy Burton

Roy rendered this striking scene in Cinema4D using the Cinema World plugin to model the mountains.



Porsche

By Tony Kinnear

In this Cinema4D render Tony's use of lighting, camera angle and background makes a simple composition very striking.



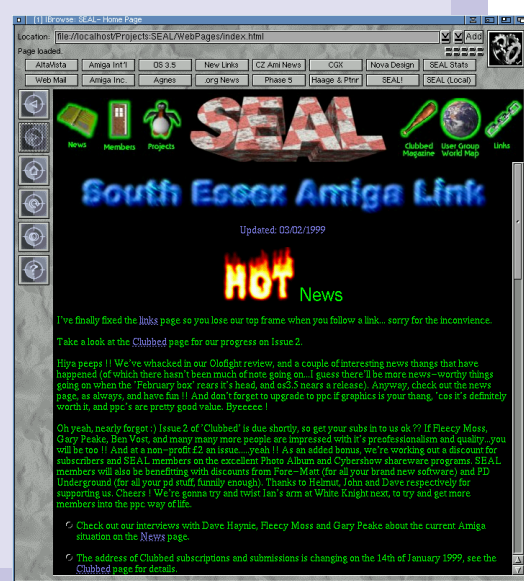
WildFIAT

By Robert Williams

The car was scanned from a advert and the texture was added using ImageFX's composite function and then smeared.

Workbench Cookbook

Believe it or not the Workbench below uses only 16 Colours. Find out how Gary Storm set it up in his Workbench Cookbook tutorial.



Tunnel

By Robert Tiffen

In this Moody Cinema4D image Robert has used lighting to good effect. I can't help thinking of "The Duel"